A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

NOVEMBER 1, 1971

Commerce Today

Coming Developments in Business and Technology

Industry Action—
A Smokeless Stack

FROM THE
SECRETARY

The Opportunity To Own

(This column was written by Thomas S. Kleppe, Administrator, Small Business Administration.)

The Small Business Administration is gearing up for unprecedented demands for financial assistance from small businesses and will be prepared to meet them. I believe that this movement, already upon us, is as good an economic index as interest rates, availability of money, or the stock market. It means the small businessman has confidence in the whole state of the economy. He wants to get out and compete and expand.

In anticipation, we have asked Congress to authorize a new loan ceiling of $5.8 billion, compared with our current ceiling of $3.1 billion, which itself was raised just recently. It is indicative of the rapid growth of this Agency, the Federal Government's "bank of last resort" for the small businessman. (If considered as a commercial bank, SBA would rank 14th nationally in size of loan portfolio, higher than such banks as Mellon National Bank & Trust, and Crocker National Corp.)

In fiscal 1971, SBA's business and disaster financial assistance to businessmen and disaster victims totaled some 79,000 loans for $1.4 billion. This is double the dollar value and triple the number of loans made three years ago.

It is interesting to note that in the entire 18-year history of the SBA, one third of its total loan activity has been generated during the current Administration.

We have given special attention to the minority community during the past three years, becoming the lead Federal agency for such financial help. In FY 1971, SBA made 7,776 minority business loans for $214 million, triple in number and five times more dollar value than in FY 1968. Currently, 34 percent of our business loans and 20 percent of our total dollar outlay are going to minorities.

Despite record growth, our sights go higher. We forecast increased loans to small businessmen during the current year, and have projected an especially significant rise during FY 1973.

We are encouraging banks to become the "majority partner" with SBA for investments in small businesses. Banks put $898 million into the SBA loan program in FY 1971, compared with $492 million the previous year. Dollar for dollar, the private sector is now injecting $11 for every $1 by SBA, thereby increasing the mileage of available Federal dollars. To date, 10,000 banks have participated in the program. At the same time, we are increasing our direct loans —$37.5 million is available this year—and we expect to further raise that level in 1972-73.

SBA does not stop with conventional financial assistance. It is loaded with potential solutions to just about every problem confronting the creation of new businesses and for making existing businesses "go."

We can help the potential businessman who has little more than a good idea, those who become victims of natural disasters, those displaced by Federal Construction projects, those who must meet new anti-pollution laws, those who need a guarantee for their lease, those who want government contracts, and those who need management and technical know-how. We have just begun new programs to extend a line of credit for construction contractors and to guarantee bid, payment or performance bonds.

Small businesses have always been the backbone of this nation, and they must be nurtured if our economy is to remain vital. We are pledged to that mission.

Thomas S. Kleppe

Commerce Today

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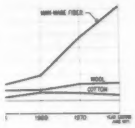

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COVER: *A smokeless smoke stack in Orange, Texas, is the result of the installation of gas-fired heaters, an important step in the rubber industry's anti-pollution program. The gas firing method eliminates smoke and fallout resulting from incomplete combustion.* (*See story on Page 4 on the economic impact of controlling pollution.*)

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Published biweekly by the U.S. Department of Commerce, Washington, D.C.

Annual subscription rate $15. ($3.75 additional for foreign mailing, $14.30 additional for domestic air mailing). Single copy 60 cents. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce Field Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.
Microfiche copy available at 95 cents per issue from National Technical Information Service, Springfield, Virginia, 22151.

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ECONOMIC
HIGHLIGHTS

New Policies Curb Prices, Interest Rates; Spurt In Automobiles Leads Retail Sales

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

Several significant changes have occurred in the U.S. economy in the relatively brief span of two and one-half months following the announcement of the Administration's New Economic Policy. The most important developments include:

—the rate of increase in the Consumer Price Index has abated, and wholesale prices have declined.

—automobiles sales advanced sharply amid signs of increasing confidence on the part of consumers.

—the upward movement in interest rates in late spring and early summer has been halted and rates now appear to be trending downward.

Statistics always lag behind events, and the new program may be well into Phase II before a full assessment can be made of the magnitude of the changes that have occurred since President Nixon's dramatic new departure in policy on August 15. Nevertheless, the data so far are very promising.

Both wholesale and retail price statistics are now registering considerable impact from the freeze. The Wholesale Price Index in September showed the largest drop in five years.

The Consumer Price Index rose only 0.2 percent in September on a seasonally adjusted basis, or an annual rate of 2.4 percent. Although the freeze impact cannot be measured precisely, the advance of only 0.2 percent in the nonfood goods category indicates that considerable resistant has been exerted. Moreover, the full effect of the freeze on this component and on the overall index has not yet been exerted because some prices are averaged over several months.

A special survey of about 4,000 prices of nonfood goods by the Bureau of Labor Statistics in September showed that 8 percent increased, 6 percent declined and the remainder were unchanged.

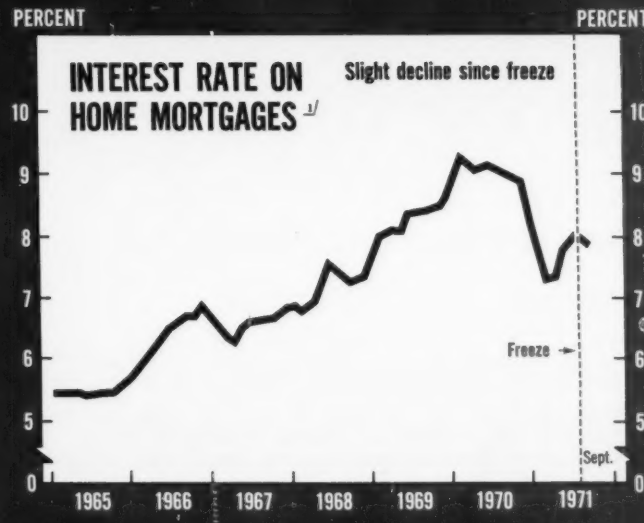
Some inflationary expectations dissolved overnight after the August 15 announcement and both short-term and long-term interest rates started declining. Since then, rates have remained below the pre-August 15 levels and major commercial banks reduced the prime rate effective October 20. Long-term rates are directly related to homebuilding, and a continuation of the early summer uptrend would have posed a threat to the 18-month-old housing boom. As measured by FHA secondary market yields, mortgage rates declined slightly in August and September.

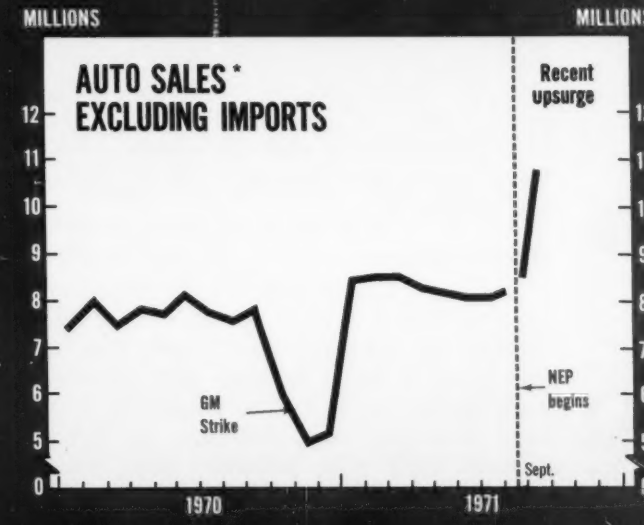
Despite a decline from August to September, housing starts were at a 2.1 million annual rate in the third quarter—the highest on record. Lower interest rates, plentiful funds for mortgages, strong Government support of homebuilding, and continued low vacancy rates indicate further expansion in this vital industry.

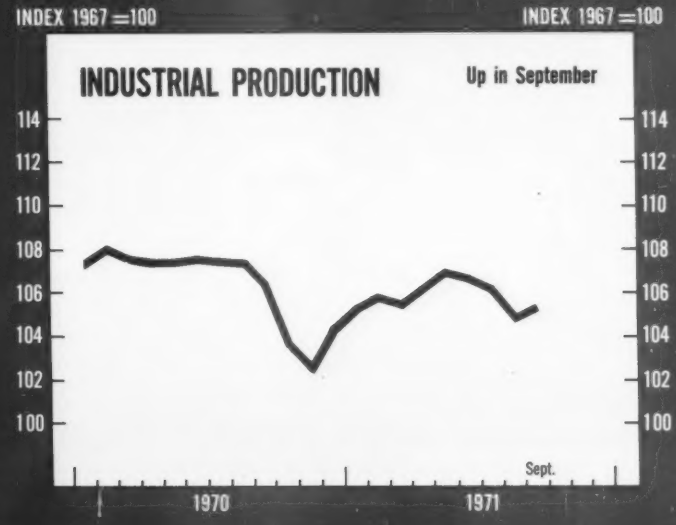
The improved prospects for stable prices and cuts in taxes apparently have bolstered consumer confidence. The most dramatic evidence was the spectacular rush for automobile showrooms in September. In addition to the change in general buying attitudes, some special factors contributed to the auto sales surge: the proposed removal of the excise tax on a retroactive basis, and the rollback of U.S. car prices to 1971 levels.

Although industrial production rose in September, automobile output was about the same as in August. The upsurge in auto sales should lead to production increases in this important industry in the months ahead.

Latest Indicators







*Annual rates

1/ Secondary market yields on FHA mortgages.

All data seasonally adjusted except the mortgage interest rate.

Commerce Today
Vol. II, No. 2
November 1, 1971

Costs Mounting In Industry Drive To Clean Up Earth

More Than 250 Major Companies Spending Billions To Rid Environment Of Pollution

TELLING IT LIKE IT IS—*Walter A. Hamilton, Executive Director of the National Industrial Pollution Control Council, and Bert S. Cross, left, Chairman of the Council, report on the increasing efforts being made by industry to clean up the environment.*

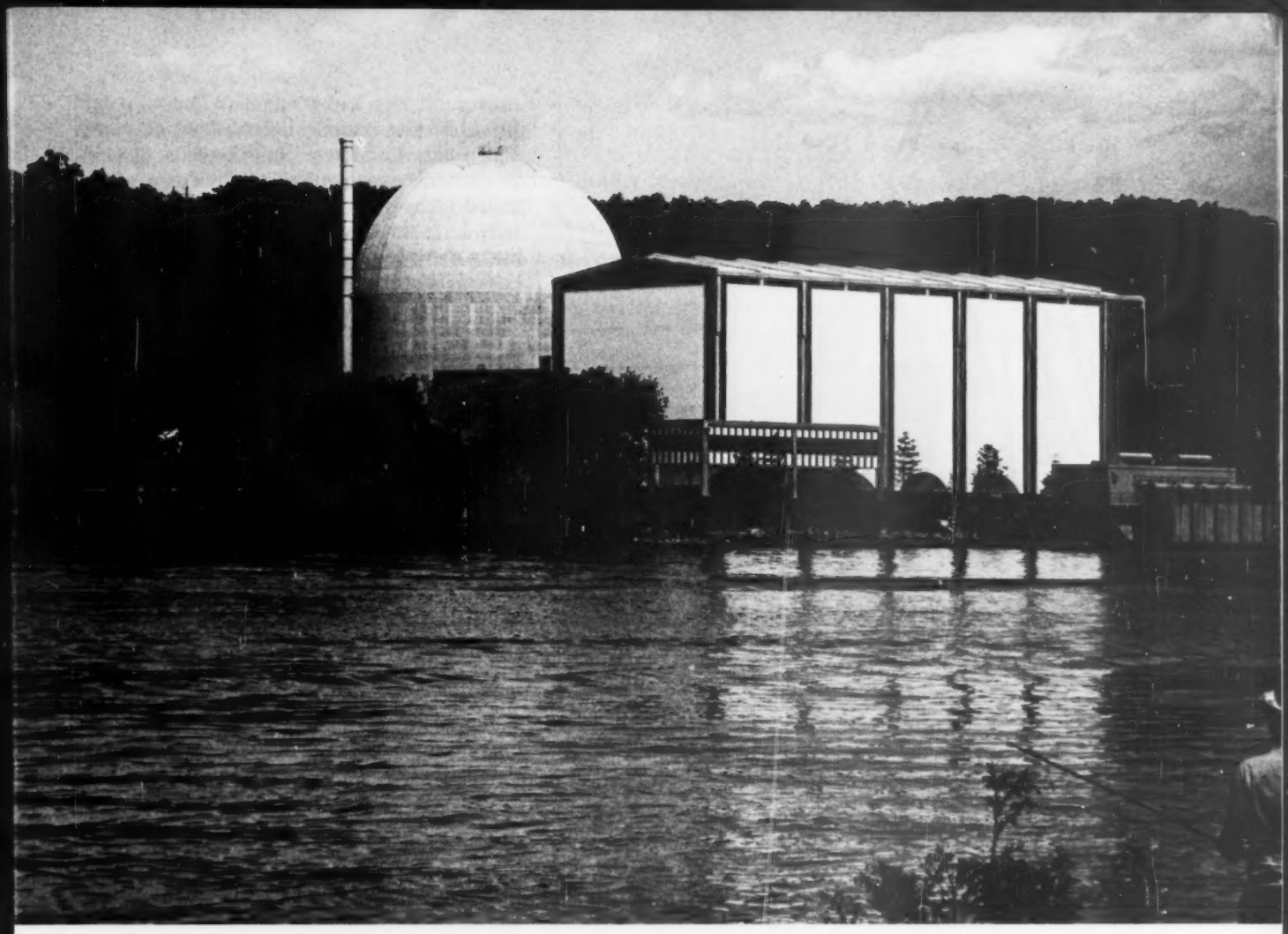
A town in Ohio is in trouble.

The town is Barberton—population, 33,000. Basically, the economy of this town depends on one plant, a chemical operation owned by PPG Co. This plant, however, is being forced to close down half of its operations, putting 1,000 persons out of work, since the obsolescence of the plant makes it impossible to make the changes required to meet the criteria established by legislation and standards for pollution abatement.

Plant closings

A similar situation involves the closing of an Olin Mathison plant in Saltville, Va.—another one-industry town which lists a population of 2,500 persons. Still another plant closing has had to be announced in a small Minnesota town, and more are being reported daily from countless small communities throughout the Nation.

A dying community could be a larger problem than existing pollution problems.



POWER AND CLEAN WATER—*A new, modern facility of Connecticut Yankee Atomic Power Co. in Haddam Neck, Conn., was planned and constructed to offer clean water to fishermen and other water sports enthusiasts, in addition to its primary service —power generation for residents of the area.*

It has taken centuries for the human race to pollute the earth. As Bert S. Cross, Chairman of the Commerce Department's National Industrial Pollution Control Council, said, "The total cost of pollution control can't be taken out of a bank to solve the problem in one afternoon."

"People," Cross added, "are just beginning to reach the stage where they realize this can't happen."

In finding answers for known environmental problems, industry has found one solution can sometimes create another pollution problem. Hasty solutions may not only increase the cost, but lower the efficiency of the effort.

Secretary Stans said that "with more emotion than knowledge, we are rapidly developing a patchwork of laws and regulations, often at variance with each other, with a dearth of scientific and technological facts, usually enforced by new agencies at various levels of government which operate according to a wide variety of standards.

"We need to clean up the environment in an orderly way, at reasonable cost, over a fixed period of time, comparing cost with benefits at each point along the way."

Industry, Cross said, is not bucking at the costs of pollution abatement. It hasn't even asked for anything in the way of a Federal subsidy. But it does need time to do the research and find the technology that will solve the pollution problems. Unrealistic time limits and too strict standards attached to them can often result in plant closings with the resulting unemployment for thousands of persons.

Much has been said about the subject of pollution. But, far too little has been written

WIGWAM BITES DUST—*Georgia-Pacific dismantles an old "wigwam" waste wood burner at its plant in Ketchikan, Alaska. Since 1959 Georgia Pacific has been eliminating the wigwams as it finds ways to utilize the solid wastes or shifting to modern smokeless burners which solve a pollution problem.*

about the giant job which industry has undertaken to solve its share of the pollution problems.

The National Industrial Pollution Control Council was created by President Nixon in 1970 to provide advice to the President and the Council on Environmental Quality, through the Secretary of Commerce, on matters involving or affecting industry policies and programs relating to pollution control and abatement. It also functions to stimulate efforts by industry toward the achievement of the Nation's environmental goals.

Cross, the NIPCC Chairman, is the Finance Chairman of the 3M Company, and the other 60 Council members are also key leaders of the Nation's major industries. Each Council member is also the chairman or vice-chairman of one of 30 Sub-Councils, which have been set up to roughly parallel the organization of the engineering, mining, manufacturing and goods distribution enterprises of the American industrial economy. The rosters of these Sub-Councils also include names recognized as chairmen of the board and presidents of U.S. companies that play important roles in the U.S. production and sale of goods. Everyone of these members is vitally concerned with solving the environmental problems.

Discussing the problems

NIPCC met in Washington, D.C., last month to discuss its progress, the economic impact of its program, and the international environmental activities with which it has become involved.

The progress is significant:

- Most of the Sub-Councils have either completed or are in the process of preparing one or more status or progress reports based on evaluations of the principal industry pollution problems and the actions which need to be taken to clear them up.

Thirty-two of these reports have been submitted to date—the last three of which were submitted to Secretary Stans Oct. 14 for transmittal to the President and Russell E. Train, Chairman of the Council on Environmental Quality. (See story on page 27). Several of these publications not only report on industry actions to clean up the environment, but also discuss technological findings which could be adapted for use in other industries.

- More than 160 industries joined a campaign launched by the Council to enlist increased support from business and industry to reduce pollution of air, water, noise and waste from industrial sources.

Each of these companies in February of this year committed themselves to establish, voluntarily, programs to accomplish desired pollution-control goals. By Sept. 15, most had fulfilled their commitments. NIPCC has a complete compilation of these industry pollution cleanup actions on file.

In addition, more than 100 companies have submitted to the Council additional commitments, written in even more precise terms than the first pledges.

"The key area of activity of NIPCC since the last meeting May 6," said Walter A. Hamilton, Executive Director of the Council, "has been in bringing into focus reappraisal of the economic impact of the rising tide of environmental regulations.

"In response to requests from Secretary

Stans and Chairman Cross," Hamilton said, "members have submitted a substantial volume of case information about specific impacts. These include reports on construction delays and the cost consequences of delays, specific data on the cost incurred in construction to meet environmental requirements, and information on specific circumstances surrounding plant closings."

Cost summaries

The 2nd Annual Report of the Council of Environmental Quality issued in August summarized various cost estimates. This summary projects the costs for all sectors from 1971 through 1975 as reaching at least $105 billion. About $5 billion per year of this figure was considered to be for capital investment by private companies.

This estimate, however, was assumed on standards set only for air and water pollution control, completely omitting noise and solid waste pollution cleanup. Furthermore, it does not include the integrated impact of pollution control costs—for example, increases in electricity costs were not reflected in aluminum costs.

As a result, NIPCC feels the costs of all pollution control will greatly exceed the $105 billion estimate.

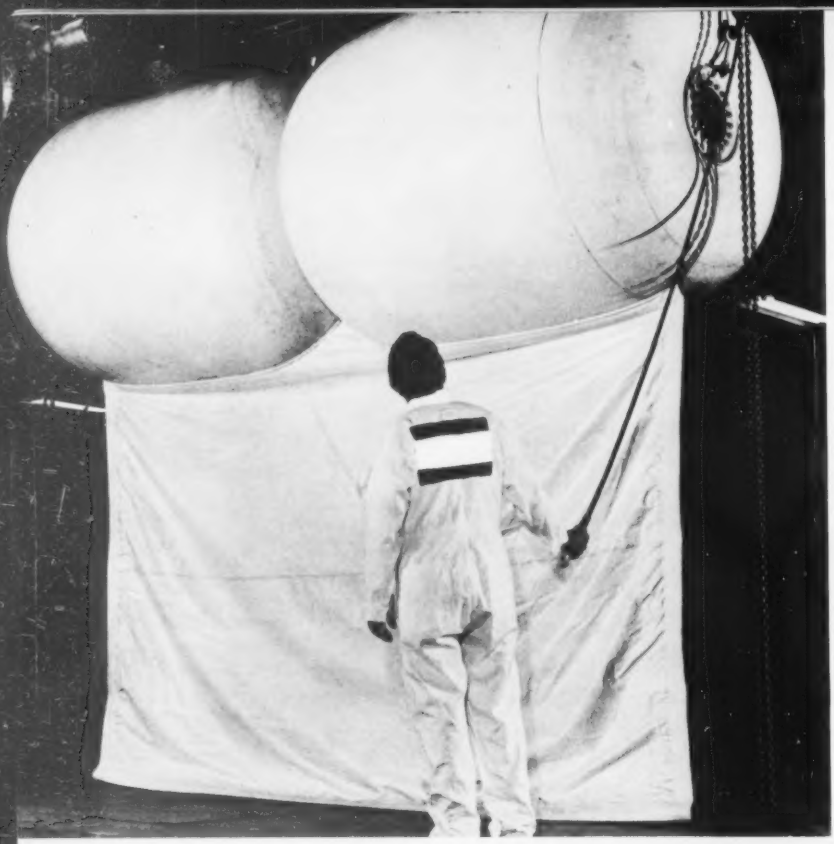
This year alone, McGraw-Hill Publications has indicated that industry will probably spend in excess of $4.5 billion just for air and water pollution control equipment and for research on its own pollution problems.

Industry expenditures

Cross has reported some of the industry costs for 1971 alone:

- Paper companies are spending $321 million for air and water pollution control.
- The steel industry will add up costs of more than $200 million for its cleanup actions.
- The electric utility industry is going through an unprecedented year in pollution control spending—some $679 million.
- The petroleum industry is spending another $507 million on pollution control.
- Chemical companies are investing $263

FOR RECYCLING—*A fork lift truck is used to stack 1,300-pound bales of waste paper before they are delivered to Container Corporation of America's reclaimed fibre mill in Los Angeles. The waste paper is reconditioned and refined and made into new paperboard—a good example of industry action.*



LOWERING THE BOOM—*A technician lowers a prototype section of a high seas oil boom after inspection. The boom, designed to contain massive oil spills from offshore drilling platforms or disabled tankers, features an eight-foot draft and a five-foot freeboard. A 3,800-foot section could be installed around offshore drilling platform in 24 hours.*

OIL POLLUTION STUDY—*In a laboratory of Shell Oil Co. a technician monitors an experiment in oil pollution abatement and clean water techniques.*

million for air and water pollution problems and for management of waste materials.

And this is just a beginning. Secretary Stans in reviewing the accomplishments of industry through NIPCC reports said that the commitments, not only made but accomplished, and the performance of industry throughout the Nation have far exceeded any goals that might have been set.

As a result of the volume of case information received from industry about specific economic impacts, Secretary Stans brought this information to the attention of the President and the Council on Environmental Quality. These reports have launched a major new effort to ascertain more precisely the extent of economic impact in prospect. The President has appointed a special Task Force to carry on this program, headed by the Chairman of the Council of Economic Advisers, Dr. Paul W. McCracken.

This committee is conducting micro-economic impact studies on eleven different industries, with the cooperation and input of members of NIPCC. The industries chosen for these studies include automobiles, bakeries, cement, fruit and vegetable processing, iron foundries, leather tanning, primary non-ferrous metals, petroleum refineries, pulp and paper, steel, and utilities. An early November date has been targeted for the completion of the studies.

Essential to all phases of the work of NIPCC, however, is setting up sound standards on pollution abatement, and setting realistic dates for when these standards will go into effect.

Questions that must be answered include 'what's a good standard?', 'what is an orderly system?', and 'how clean is clean?'

One industry represented on the Council, for instance, discovered that even after treating, the water leaving its plant still contained an undesirable chemical, even though in minute amounts.

After a thorough investigation, another discovery was made—the water entering the plant already contained this chemical—and a higher level was measured there than in the water which left the plant.

One fact is evident. Industry *is* concerned and doing everything it can to help cleanup the environment, even on international levels.

The dedication of the more than 250 major industries involved in the Council and the Sub-Councils proves this.

—NIPCC

Textile Pacts Offer Fair Market Access Without U.S. Disruption

Agreements With Japan, Hong Kong, Taiwan, Korea Seen Averting Permanent Trade Barriers

The new textile marketing agreements between the United States and four Far Eastern nations have achieved major goals steadily sought by the Administration. They offer fair access to the U.S. market while stemming the disruption caused by runaway import increases.

Growth rates in man-made fiber and wool textiles exported to the U.S. by Japan, Korea, the Republic of China (Taiwan) and Hong Kong are set at between 5 and 7.5 percent yearly in the agreements. This is significantly larger than the rate of growth within the U.S. market. At the same time, it is substantially less than the abnormally large increases in such textile imports from the Far Eastern nations in recent years. Growth rates for wool textile exports are held at 1 percent annually.

President Nixon, in welcoming the word that the lengthy textile negotiations had come to a successful conclusion, noted that an unfortunate development affecting all of America's trade relations with the world had been averted. Had the textile situation not been resolved, he said, pressures within the country could have resulted in the erection of permanent trade barriers around the U.S.

The problem of heavy and escalating imports of textiles and apparel from the Far East has been a major preoccupation for U.S. officials attempting to alleviate the national balance of payments deficit. The 1971 figures in the textile and apparel field are expected to show imports exceeding exports by $2.15 billion, or more than the entire expected 1971 national trade deficit. This flood of imports is the largest contributor to the trade deficit.

Secretary of Commerce Stans initiated the Administration's efforts to negotiate reasonable limitations on textile and apparel imports from the Far East in early 1969 through missions he led to 11 countries in Europe and the Far East on behalf of President Nixon.

In concluding the bilateral arrangements with each of the Far Eastern nations, the U.S. still made it plain that it is supporting efforts for a worldwide all-fiber textile agreement. It expects such an agreement to be the ultimate solution for the problems experienced by all the national textile industries.

"Looking to the future," said Peter G.

U.S. Trade Balance For Selected Products

Millions of dollars

	1966	1967	1968	1969	1970	Est. 1971
Textile & apparel products						
Cotton, wool & man-made fiber products	—525	—518	— 828	— 983	—1,286	—1,920
Man-made fiber products	43	— 21	— 185	— 348	— 672	—1,365
Other textiles	—271	—254	— 276	— 323	— 256	— 230
Total, textile & apparel products	—796	—772	—1,104	—1,306	—1,542	—2,150
Steel	—878	—991	—1,500	— 946	— 948	—1,500
Automobiles [1]	—577	—629	—1,164	—1,266	—1,717	—2,000
Shoes	—147	—211	— 324	— 428	— 550	— 675
Consumer electronic products	—337	—428	— 663	— 938	—1,142	—1,600

[1] Excludes Canadian trade.

Peterson, Assistant to the President for International Economic Affairs, "we believe that the resolution of this difficult issue bodes well for the possibilities of positive initiatives in the field of foreign economics. Because these are negotiated agreements, a difficult problem has been resolved without the risk of confrontations and retaliations."

He also said: "Now if we can move ahead on the constructive negotiations of the monetary trade and defense matters in conjunction with our lifting the surtax, we believe this country and the rest of the world will be ready to move ahead on some new initiatives toward the President's goal of a prosperous and open trading world."

Peterson announced the agreements Oct. 15 in Washington. Ambassador-at-Large David Kennedy signed the memoranda of understanding for the U.S. in Japan and South Korea. Agreement was reached with Hong Kong in Washington. Earlier, the U.S. had reached agreement with the Republic of China (Taiwan).

Surcharge to be lifted

The United States will lift its 10 percent import surcharge on all textiles covered in the new agreements as soon as the formalities of the agreements are completed. The surcharge was imposed Aug. 15 as one of the anti-inflationary measures in the Administration's new economic policy. The term of the agreement with Japan is three years, with possible extensions; the other nations signed five-year agreements. Details on the quota bases and allowable imports within categories were not available as this issue went to press.

Peterson described the place of the textile industry within the U.S. economy to explain why the industry "has been considered a special case by each of the last several Administrations."

The U.S. textile industry embraces about 32,000 plants, in all 50 States, currently employing about 2.3 million persons. It is the largest of all the manufacturing industries, with about one eighth of the total U.S. manufacturing work force.

Some one million workers in related industries, including cotton farmers, wool growers and others, also depend on textile and apparel manufacturers to buy their products. Jobs in the textile and apparel industry are concentrated in areas that have been traditionally less able to make a rapid adjustment to the influx of imports.

Also, 61 percent of the jobs in the industry are in non-metropolitan areas where they often constitute the backbone of the local economy.

In addition, the industry is an important source of employment to groups which suffer the highest rates of joblessness: unskilled and semi-skilled workers, the young, women, and racial minorities. Black employment in the textile industry now stands at 14.3 percent or about 40 percent above the all-industry average.

In the last 2½ years, over 100,000 jobs have been lost in this industry. During this period over 700 textile and apparel firms have failed. An apparent and significant reason was the sharp and sudden increase in the amount of textiles imported from other countries.

It is estimated that overall textile imports in 1971 will be over 40 percent greater than in 1970. Imports of man-made fiber textiles are expected to increase by over 70 percent this year over last year. For 1972, textile imports were projected to grow by an additional 38 percent.

If this sharp growth in imports were realized, in the absence of agreements, the job loss of more than 100,000 since January of 1969 would have been expected to rise as high as a quarter of a million jobs by the end of next year.

Record high imports of textile and apparel products continue to increase at an extremely high rate. In the first eight months of 1971, man-made fiber textile imports, com-

pared with the same eight months of 1970, were up 84 percent for Taiwan, 74 percent for Japan, 71 percent for Korea, and 28 percent for Hong Kong. During the recent negotiations it became very clear that these rates of increase would continue if restraints were not applied.

Total imports of cotton, wool and man-made fiber textile and apparel products during the first eight months of 1971 were at an annual rate of more than six billion equivalent square yards, compared with the 4.45 billion square yards imported in 1970.

Cotton, wool and man-made fiber textile and apparel product imports totaled a record high 5,553 million equivalent square yards in the year ending August 1971, or 24 percent higher than total imports in 1970.

Man-made fiber product imports totaled 3,905 million square yards in the year ending August 1971. This was 42 percent higher than the 2,751 million square yards imported in 1970 and at an annual rate of nearly 4.4 million square yards.

Cotton product imports totaled 1,513 million square yards in the year ending August 1971. This was 2 percent lower than the 1,535 million square yards imported in 1970 but at an annual rate of nearly 1.6 billion square yards.

Wool product imports amounted to 136 million square yards in the year ending August 1971. This was 19 percent lower than the 168 million square yards imported in 1970 and at an annual rate of 115 million square yards.

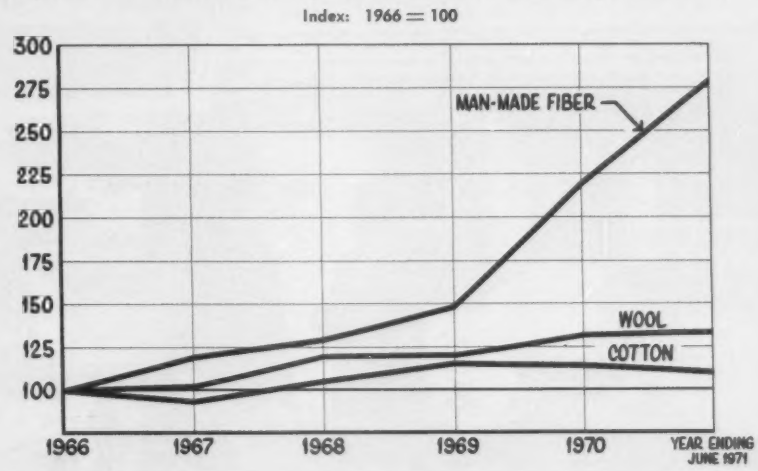
Imports dominate in some lines

There has been substantial import penetration of the domestic market in many key category lines. For example, imports of the following products account for more than half of domestic consumption: in man-made fiber products: knit blouses, sweaters, women's knit slacks, women's coats, knit sport shirts, and woven dress shirts; in wool products: women's woven slacks, knit blouses, knit sport shirts, sweaters and worsted fabric.

Capital expenditures for new plant and equipment for the textile industry declined to $580 million in 1971. Although this is 4 percent above 1970 expenditures, it is 8 percent less than in 1969 and significantly below the $820 million level of 1966.

Broadwoven fabric production in the first half of 1971 was 4 percent below the same period in 1970. Total production in 1970 was 9 percent less than in 1969 and the lowest since World War II. During the first half of 1971, cotton broadwoven fabric production was down 1 percent; man-made fiber fabric output was down 7 percent; and wool fabric production was down 38 percent.

Import Penetration, Textile Products, 1966-71



Hourly earnings of production workers in the U.S. textile and apparel industry continue to increase although lagging far behind the average for all manufacturing. The average hourly earnings of textile workers in September 1971 was $2.59 or five percent above a year earlier. For apparel workers the average was $2.52 or three percent above a year earlier. The average for all manufacturing industries was $3.60, more than $1.00 an hour greater.

Production in the U. S. wool textile industry has declined substantially since the mid-sixties. Production of wool fabrics as measured by the Federal Reserve Board index, was 52.4 (1967=100) in June 1971 compared with an average of 72.5 in 1970 and 109.8 in 1966. Production of wool broadwoven fabric in the first half of 1971 was 38 percent below the comparable period of 1970.

Total output of fabrics in 1970 was down 19 percent from 1969 and the lowest since before World War II. Unfilled orders for wool fabric at the end of June 1971 were 44 percent less than June 1970 indicating a further substantial decline in production during the coming months. Employment in wool mills in August 1971 was 24 percent below a year earlier and 39 percent below August 1966.

Nixon's New Program To Strengthen Aid To Minority-Owned Firms

Executive Order Gives Stans More Authority; Proposals Ask More Money, Loan Rule Changes

Working capital may be the lifeblood of a business, but the market's need for that business, the managerial and technical skills of its owner, and the overall business know-how of its head, are equally important to its success.

To expand the Federal program that offers assistance on all these phases of running a business to present and potential minority entrepreneurs, President Nixon signed an Executive Order this month. The new order gives Secretary Stans, through the Commerce Department's Office of Minority Business Enterprise, the authority to carry out a stronger, more comprehensive program for minority business development.

On the same day, the President also sent a message to Congress, requesting an increased budget for OMBE, and asking for legislation which would bolster the Minority Enterprise Small Business Investment Company program, which provides venture capital to minority firms.

The proposed budgetary increases to OMBE would give that agency an additional $100 million for minority business development over the next 18 months. In addition to the $3.6 million under which OMBE is currently operating for this fiscal year, another $40 million has been requested for expanding the program. For fiscal year 1973, the budget would be raised to $63.3 million, if Congress agrees.

The increased funds for OMBE, the Administration's coordinating agency for minority business enterprise Federal programs, would provide the agency with monies to set up expanded projects of technical assistance and management services.

"Approximately 10 percent of these new funds," said the President, "would be used

SERVICE STATIONS INCREASE—*The number of minority-owned stations has increased dramatically to more than 13,000 since 1969. This minority-owned Citgo station in Springfield, Mass., was started by UNION, Inc., a black improvement organization. Shown on ramp are Paul Welch, Citgo dealer salesman, left, and Oba Green, who is in charge of operations and training employees for UNION, Inc.*

at the national level—to strengthen minority business and trade organizations, to generate broad private programs of marketing and financial assistance, to develop training programs, and to foster other national efforts."

Most for local use

The bulk of the funds, however, would be spent where minority businesses can be generated. "The remaining 90 percent of the new money," Mr. Nixon said, "would be spent on the local level—supporting a variety of efforts to identify, train, advise or assist minority businessmen and to put them in touch with one another and with non-minority businessmen who can provide them with additional help."

Local level activities would include identifying and developing local business opportunities, locating candidates for business opportunities, sponsoring local management workshops, assisting in the planning and establishing of new or improved enterprise, and providing professional management and technical assistance to minority businessmen.

According to Secretary Stans, these funds will be spent "in the local communities, and very largely with organizations of the local minority people themselves to permit them to serve those among their constituency who want to organize a business of their own." The help would not stop, Stans added, when a minority businessman opened his doors, but could be continued until he had reached some measure of success.

Stans emphasized that the new monies would be in addition to all direct loan money, guarantees, government purchases and other direct government assistance now available for minority development. "These funds," he said, "totaled $200 million in 1969, $566 million this past year, and a goal for approximately $700 million has been established for the fiscal year ending June 30, 1972."

The new, enhanced program will meet

MINORITY-OWNED BANKS INCREASE—*The number of minority-owned banks in the United States increased from 23 in 1969 to 35 in 1971.*

three basic needs of minority citizens who want a chance to compete in the marketplace:

- It will stimulate wider access to business resources, such as capital and profitable markets.
- It will provide greater assistance in starting new businesses and in improving existing ones.
- It will provide new ways of learning, upgrading and applying the skill of business management.

Stans referred to the new program as "Phase II" of the minority business development plan.

The first for OMBE

The Office of Minority Business Enterprise was established by the President in 1969 in the Commerce Department to help carry out the Administration's goal of giving "every man an equal chance at the starting line and an equal opportunity to go as high and as far as his talents and energies will take him." The office at that time was to serve as the coordinating agency in the Federal program and to increase the opportunity for the development of new minority businesses and the expansion of existing minority firms.

In 1969, the President also appointed an Advisory Council for Minority Enterprise, to serve as a source of information on developments which affect minority enterprise, and to report on any measures which might better achieve the objectives of the program. The council was composed of approximately 100 individuals representative of both minorities and the white majority.

OMBE, for its first two years, had as its prime responsibilities the organizing of government activities and programs in the field of helping minorities develop businesses of their own. It also stimulated the private sector to do more to help individuals from the minority population in setting up their own firms.

Information center

One of OMBE's most important programs was to establish a center for the development, collection and dissemination of information helpful to persons or organizations interested in assisting with minority business development.

Under "Phase II", OMBE's responsibilities are larger. It will continue, through Secretary Stans, to be the Federal agency coordinator, and to promote the mobilization of activities and resources of state and local governments and the private sector.

In addition, however, the President has directed the Secretary to provide financial assistance to public and private organizations so that they may render technical and management assistance to minority business enterprise, and defray all or part of the costs of demonstration projects designed to overcome special problems of minority business enterprises.

The Secretary will also have the responsibility of developing comprehensive plans and specific program goals for the program, with the participation of other Federal departments and agencies, state and local governments, business, educators, and community leaders, as well as other members of the private sector interested in minority business growth.

In "Phase II" of this program, the Advisory Council for Minority Enterprise is under the Secretary, and will advise him and such officials as he may designate on problems and matters referred to the council.

Sam Wyly, Chairman of the Advisory Council, said that the Council is commending the President and the Administration for this new program, which is a prompt response to a minority business enterprise report made by this body last February.

"It is the basic judgment of the Advisory Council," he stated, "that the progress to date has been substantial. It has been very real, and the combination of recorded progress in loans and in grants and in government procurement combined with the new

commitments—particularly in the area of management and technical assistance—constitutes a real substantial contribution to the minority enterprise effort."

Two-year progress

The progress made over the past two years has been significant. John L. Jenkins, Jr., the new OMBE Director, reports that the aggregate Federal purchases from minority businesses on a direct, competitive basis has been increased more than eleven-fold—from $12.7 million in fiscal 1969 to $141.7 million in fiscal 1971.

Other factors show that:

- The franchise industry has increased the number of minority-owned franchises from 405 in 1969 to 1,184 in 1971.
- The number of minority-owned service stations has increased from an estimated 10,720 in 1969 to an estimated 13,010 in 1971.
- More than $100 million in new monies has been committed by the Federal Government and the private sector since October of last year to be deposited in minority-owned banks.
- Minority-owned automobile dealerships have increased from 14 in 1969 to 87 in 1971.
- Minority-owned banks in the U.S. have increased from 23 in 1969 to 35 in 1971.
- The American Bankers Association has instituted a program designed to increase its member banks' total portfolio of minority business loans by $1 billion by 1975.
- Minority Enterprise Small Business Investment Companies have financed 270 businesses which employ over 2200 people and which have estimated annual payrolls of over $11 million and an estimated annual sales of over $45 million.

New legislation has also been passed providing crime insurance at reasonable rates to disadvantaged businessmen. Other legislation has become law which assures the availability of surety bonds for minority contractors.

The new legislation which President Nixon has proposed to Congress would strengthen the government's growing program for MESBICs, which loan money and provide venture capital to minority businesses.

Mr. Nixon has asked that Congress lower the level of private financing required to qualify for financing from the SBA on a three-for-one basis. Presently, a MESBIC must raise more than $1 million before it can qualify for the three-for-one borrowing. Up to $1 million, SBA returns two-for-one. The new legislation, if enacted, would cut this requirement to $500,000.

MINORITY-OWNED SUPERMARKET—*Detroit's minority-owned supermarket stocks merchandise valued at approximately $100,000 and employs 50.*

The President also asked for increased equity to MESBICs in the form of preferred stock to be purchased by the SBA, and he proposed lowering the interest rate on SBA loans to MESBICs to three points below the normal rate set by the Treasury Department during the first five years of the loan.

Other legislation endorsed by the President included the Small Business Amendments Act of 1971, the Indian Business Development Program Act, the Indian Financing Act, and the Washington, D.C., Development Bank Act of 1971, as well as his proposal to create in the Department of Commerce a new Assistant Secretary for Minority Enterprise.

Secretary Stans said that not only is the program unique—one run by a government agency, but with its primary attention directed to the minority communities and the private sector—but the greatest return it will bring is . . . "the realization by persons who are now disadvantaged that they *do*, in fact, have a stake in the system, and that it is in fact, responsive to their needs.

"The government," he continued, "can provide the stimulus, but the willingness to risk, the drive to compete on an equal footing, once that footing is built, must come from the minority businessman—just as it is the majority businessman who must show by deeds that our marketplace is open to all." *—Office of Minority Business Enterprise*

U.S. Corporate Aircraft To Get Locator Beacons Under New Safety Law

Federal Research Determines Battery Power Minimum, Transmitter Testing Procedures

Measures are under way to end once and for all the kind of hopeless tragedy that overtook Carla Olien, who wrote in her diary April 30, 1967:

"Today is my 16th birthday; I wanted to be rescued today."

Her next sentence reflected fading hope of being found in the desolate spot in northern California where her father's light plane had crashed 50 days earlier. "I hope you are happy, Search and Rescue," she wrote. "You haven't found us yet."

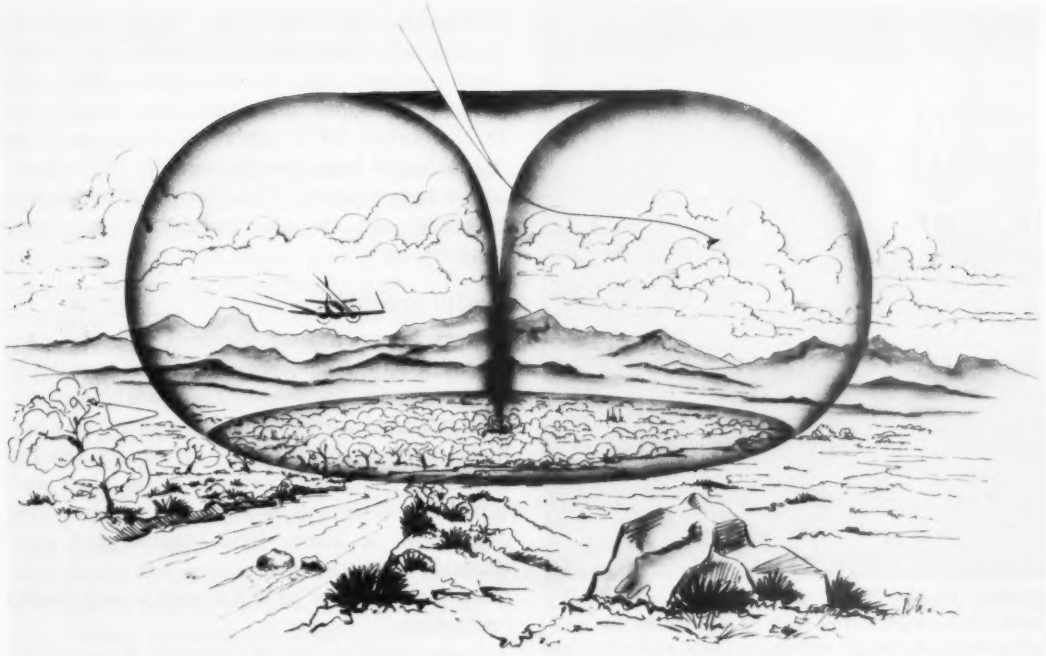
Carla was never found. She and her mother survived for more than two months before dying of exposure and starvation. After the crash landing, her father left to seek help and never returned. Her diary, picked up by a deer hunter the following October, told how the family had suffered only minor injuries when the plane landed.

The actions destined to end such tragedies are twofold: A law requiring all except certain aircraft manufactured or imported after December 30, 1971, to be equipped with emergency locator beacons or transmitters as they are known officially; and work completed by Commerce's National Bureau of Standards to make certain that such beacons transmit effective signals.

Non-jets affected

The new law affects non-jet corporate and private aircraft. It is the result of persistent efforts by Colorado Senator Peter H. Dominick, himself a pilot. His first attempt, made in 1969, to have locator beacons required by law was unsuccessful. In November, 1970, he succeeded in attaching such a requirement to the Health and Occupational Safety Act, which was signed into law by President Nixon December 29, 1970.

The requirement amends the 1958 Federal Aviation Act to provide that all aircraft shall



SIGNAL VISIBILITY—*This artist's conception illustrates how emergency locator beacons help search planes locate downed aircraft (center of picture, among trees). Shaded area indicates the radio "visibility" or space where search planes are able to receive distress signals from the beacon. FAA specifies that signals must be strong enough to be easily detectable by the searchplane radio within a radius of 25 nautical miles at 3,500 feet above the ground. Boundaries of the signal are not finite as indicated in the drawing but extend to infinity with decreasing intensity.*

be beacon-equipped with some exemptions, such as certain jets under Federal Aviation Administration (FAA) radar control, and various others, including foreign and military planes.

Initial production of beacons for new and presently-operating aircraft has been estimated at $20 million.

The Bureau of Standards, under contract with FAA, determined the optimum amount of power required to produce a reliable beacon signal that could be picked up by a search plane 25 nautical miles away and flying at an altitude of 3,500 feet above the ground. These were the FAA specifications.

The Bureau found that it was better to use a minimum amount of power to broadcast the signals. This not only prolongs the life of batteries, but also provides a better homing signal for search planes. Higher power, it was learned, causes signals to ricochet off hillsides and canyon walls, deceiving searchers about the true location of the beacon.

In addition, the Bureau worked out a testing procedure which the FAA can use routinely with a high degree of certainty to determine whether beacons meet its specifications. This involved the building and calibration of a standard antenna for typical beacons which the FAA can use within a small area to make checks, since obviously it would not be practical to conduct flight tests every time it was necessary to test a beacon. By this means, it will be possible to ascertain whether a particular beacon radiates the optimum power required.

Confirmed findings

In carrying out its assignment, the Bureau first produced by computer calculations a mathematical model of the required antenna characteristics, and then confirmed the theoretical findings by tests. A model antenna built for the tests was mounted in the center of a circular aluminum sheet eight feet in diameter which provided a uniform ground plane. The antenna was placed on Table Mountain outside of Boulder, Colorado, where the tests were made. The antenna was fed known amounts of power, and tests were made from aircraft flown at various distances from the antenna. Used in the flights were an Army helicopter from nearby Fort Carson, planes of the Colorado Civil Air Patrol (CAP). and the FAA's DC-3 "flying laboratory."

MODEL ANTENNA—*A model antenna designed and built by the National Bureau of Standards for making measurements of emergency-locator-beacon antenna pattern and field strength is mounted on Table Mountain outside Boulder, Colo. The antenna is mounted at the center of an eight-foot diameter aluminum sheet.*

Tests by the Bureau revealed design deficiencies in some beacons which allowed them to radiate signals outside their assigned frequencies. This, according to the Bureau's preliminary report to the FAA, could jam other radio communications systems in the area. The report also predicted that a poorly designed emergency locator beacon turned on by a crash near an airport would probably jam all communications from the control tower to aircraft in the vicinity.

Prediction verified

Two weeks later a CAP plane took off from Buckley Field near Denver with its emergency locator beacon accidentally turned on and verified the Bureau's prediction. The pilot, unaware of his flying disaster signal, temporarily disrupted radio communications in his path from Denver to Akron, Colorado.

The design deficiencies of some beacons, Bureau engineers reported, are comparatively easy to remedy by the addition of a filter that will keep the broadcast signal within its proper frequency band.

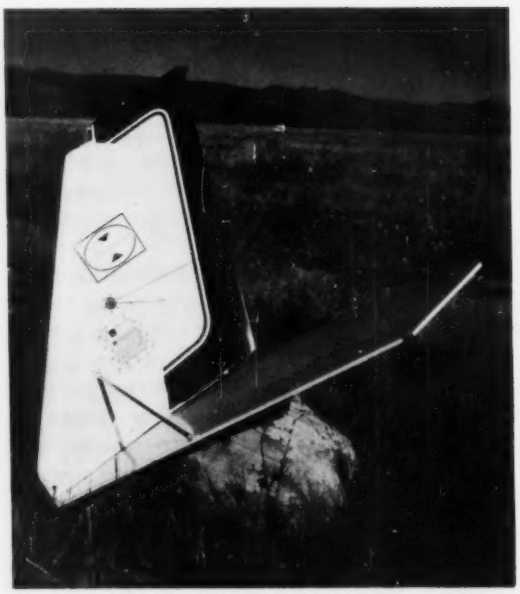
FAA asked the Bureau to determine suitable specifications for power radiated by beacons after a series of inconclusive tests made to ascertain whether beacon transmitters conformed to requirements of a law enacted by the State of California. The California law originally would have required all commercial aviation to carry beacons, beginning in November, 1970, and general aviation to do the same, beginning in November, 1971. However, because of the inconclusive tests the November, 1970, deadline was postponed. The State of Washington requires all air-taxi operators to carry beacons.

Radio visibility

Emergency locator beacons are self-contained, battery-powered units that broadcast radio signals on frequencies established by international agreement for use of downed fliers. These signals give air crash victims a radio "visibility" several miles high and several wide which is not obscured by rain, fog, snow or sleet. The beacons are particularly designed for planes not under constant surveillance of FAA radar and traffic controllers.

Some versions of the beacon transmitter are about the size of a small transistor radio and may be packed with a parachute or carried in the pilot's pocket. Others are designed to be attached to or built into the aircraft itself and are turned on by the impact of a crash or by immersion in water. Some will eject when a plane crashes, thus escaping damage from possible fire.

General aviation, which includes 137,000 planes, appears to have the most urgent need



TAIL BEACON—*One type of emergency beacon is built into the tail section of an aircraft with the antenna extending horizontally from stabilizer.*

for the beacons. These aircraft are owned and operated by private individuals and corporations other than air carriers, and their pilots often take off without filing a flight plan with the FAA.

Few of the missing planes have been equipped with a beacon, but when they have been, the search time was cut dramatically. In Colorado, for example, about 20 general aviation planes go down every year, not an unusual number. Col. C. M. Fountain, Colorado Wing Commander of the CAP, has estimated that the search time for a plane without a beacon is four days. The only plane equipped with a beacon that went down in Colorado was located in nine minutes.

The Coast Guard credited a beacon with saving the life of a private pilot after his light plane crashed in a remote mountain wilderness in July, 1970. Captain William N. Banks, Chief of the Coast Guard's Search and Rescue Division in Washington, D. C., reported that the beacon made it possible to locate the pilot in less time than would have been necessary otherwise to ascertain that he was missing. It was the first case in which a Coast Guard rescue was assisted by a beacon.

Despite its advantages, the beacon has been rejected by a vast majority of private pilots. The reason most frequently given by pilots for not having a beacon is cost, which ranges from $100 up. Another factor is the optimism characteristic of pilots. None of them expects to crash.

The disinterest of the fliers is counterbalanced in some measure by organizations responsible for search and rescue; the Coast Guard, Air Force, CAP and FAA. They would require every plane to have a beacon before it is allowed to take off.

Search costs

Senator Dominick, in pressing for the law to require the use of beacons, emphasized that—if aircraft owners do not install beacons, taxpayers have to pay many times their cost in search. He submitted information showing that the Air Force and CAP spent 27,445 hours in air search in 1968, for which the cost of gasoline alone was well over a quarter of a million dollars. He said that, between 1961 and 1965, the total bill for air search was $59 million.

Another factor cited by the Senator was the cost in human suffering from survivors whose rescue was delayed or who could not be found, and the difficulties of families when estates of missing persons were tied up for years because they were never found but could not be presumed to be dead. He discovered that there were 139 such cases between 1961 and 1969.

Thus there have been many persons who suffered the plight of Carla Olien, in one variation or another. Her diary merely made the story more dramatic. Doubtless these people, tiny specks on the landscape below, often hopelessly watched rescue planes crisscross the sky, able to see the planes whose pilots could not see them.

For such people in the future, there is now a mandatory law which in time will save them from themselves and those whose lives are in their care. And also, the work of the Bureau of Standards should go far to removing impediments to the use of beacons, and assist in making laws for their use enforceable. The FAA has used the techniques and recommendations of the Bureau in devising specifications which manufacturers and importers of aircraft will be required to meet.

—National Bureau of Standards

COPTER TESTING—*The Bureau of Standards test crew lashed a calibrated receiving antenna to an Army helicopter used to measure emergency-locator-beacon antenna pattern and field strength.*

DOMESTIC BUSINESS REPORT

- **Post-Freeze Program is in motion**
- **White House Conference keynoters announced**
- **Median family income continues rise**
- **More involvement needed for minorities**
- **Ombudsman inquiries climb to 1600**

Nixon Asks New Powers To Aid Inflation Fight

The goal of the Administration is to drive down inflation by 50 percent by the end of next year.

The machinery to help make this happen has been set in motion:

- President Nixon has sent to Congress a Bill and Analysis, requesting the extension of the Economic Stabilization Act, and additional authority to carry out the recommendations made for Phase II of the New Economic Program.
- The Price Commission, which will set standards for prices and rents in the Post-Freeze Program, held its first meeting Oct. 26.
- The Pay Board, which will develop wage standards for Phase II, met for the first time Oct. 27.
- A special three-judge Federal court upheld the constitutionality of the law that gives the President the authority to control wages and prices, striking down a major legal challenge to the wage-price freeze.

President Nixon appointed Judge George H. Boldt, chief judge of the U.S. District Court for the Western District of Washington State, to head the Pay Board. C. Jackson Grayson, Jr., dean of the business school of Southern Methodist University, he named as chairman of the Price Commission. Both chairmen will serve full time in these positions.

The other members of the 15-man Pay Board include four other public members, five representing

Donald Rumsfeld
Director
Cost of Living Council

labor and five representing business.

The labor members named by the President are George Meany, AFL-CIO president; I. W. Abel, president of the United Steel Workers Union; Leonard Woodcock, president of the United Auto Workers Union; Floyd E. Smith, president of the International Association of Machinists and Aerospace Workers Union; and Frank E. Fitzsimmons, president of the Teamsters Union.

The business members are Rocco Siciliano, former Under Secretary of Commerce from 1969 to early this year when he became president of TI, Inc., Los Angeles, Calif.; Virgil Day, vice president for business environment of the General Electric Co.; Robert Bassett, chairman and president of Bassett Publishing Co. and Vertical Marketing Inc. of Chicago, Ill.; Leonard F. McCollum, Continental Oil Co. board chairman; and Benjamin F. Biaggini, president of Southern Pacific Co.

Besides Boldt, the public members are Arnold Weber, who is resigning as executive director of the Cost of Living Council to serve on this committee; Neil H. Jacoby, professor of business, economics and policy at UCLA; William Caples, president of Kenyon College, Gamblier, Ohio; and Kermit Gordon, president of the Brookings Institute.

In addition to Grayson, the Price Commission members are William Scranton, president of the National Municipal League and former governor of Pennsylvania; John William Queenan, recently retired as a managing partner of Haskins and Sells; William T. Coleman, Jr., a Philadelphia lawyer and president of the NAACP Legal Defense Fund; Marina Whitman, professor of economics at the University of Pittsburgh; Wilson Newman, vice chairman of the board of the National Bureau of Economic Research; and Robert F. Lanzilotti, dean of the college of business of the University of Florida.

Charls Walker
Under Secretary of Treasury

Both committees will function with the Cost of Living Council, which is charged with the primary responsibility for administering the stabilization program.

The President has also sent a Bill and Analysis to Congress, requesting the extension and amendments to the Economic Stabilization Act of 1970.

Rewriting the Act

Instead of asking for a simple one-year extension to the Economic Stabilization Act of 1970, it was found necessary to substantially rewrite the Act to include stand-by controls over interest and dividends and to clarify the existing statute to cover various parts of the planned program, according to Donald Rumsfeld, Counsellor to the President and newly appointed Director of the Cost of Living Council.

Rumsfeld, together with Charls E. Walker, Under Secretary of the Treasury, and Stanley Rose, Deputy General Council to the Cost of Living Council, held a press conference Oct. 19 to explain the new legislation proposals.

The bill would provide the basis for Congressional action and strengthen the constitutional foundation of the Act. In addition to the authority to the President for the stabilization of interest and dividend rates at "levels consonant with orderly economic growth," it would give the President the right to delegate authority to boards and commissions to administer the program. (The Pay Board, the Price Commission and the three new committees would be covered under this legislation).

Part of the legislation is an amendment that would excuse all but the Chairmen of the Pay Board and the Price Commission from existing conflict-of-interest laws. The very nature of these boards would load them with conflicts of interest; for instance, the Pay Board will have five members each from labor, industry and the general public.

In addition, civil penalties of $2,500 and criminal fines of $5,000, to be enforced by the Justice Department, are requested in the bill. The Attorney General would bring injunction actions on behalf of the wage-price agencies, and the court issuing an injunction would be able to order restitution.

The new bill also asks for a Temporary Emergency Court of Appeals, consisting of three or more district court or circuit court judges, designated by the Chief Justice of the U.S. This court would serve two functions:

- The normal function of a court of appeals in handling judicial review of wage-price cases from federal district courts, and
- The exclusive jurisdiction to rule on the constitutional validity of the Act or any regulation or order of Phase II agencies.

Confident of success

Referring to the section of the legislation which gives the President authority to stabilize interests and dividends, Rumsfeld said that he did not contemplate it would have to be used, "because we are reasonably confident that the overall success of the new economic policy, by severely puncturing inflationary expectations, will actually cause interest rates to decline."

Actually, there has already been

a dramatic decline in interest rates. The rates on Government securities have reduced. A Treasury note of $2 billion, a three-year, four-month note, was issued this month at a rate of 5.625 percent. In late 1969 and 1970, the Treasury Department was paying 8 percent for that type of money.

Other interest rates have begun to follow suit, and it is felt more will be decreasing.

Sectors involved

Walker said that there would be four sectors of the economy involved in the post-freeze program:

- *Raw agriculture products.* These have not been regulated in Phase I, and it is not contemplated they will be regulated in Phase II.
- *Industries and businesses with considerable concentration of economic power.* The price actions and the pay actions of these companies extend into the whole economy, with great ramifications. (Walker listed as an example the steel industry.) These companies will have to get prior permission from the Price Commission for a price increase and from the Pay Board for a pay increase.
- *A second group of industries.* These companies would not have quite the economic concentration of the first group, but would still have a general influence on the economy. These companies would have to report, after the fact, their actions. Their pay-increase or price-increase actions would be subject to revocation, post-audit or a rollback by the boards.
- *Small businesses and industries.* This group, Walker pointed out, would include the vast sector of the economy. They would be policed the same way the wage-price freeze is now being policed—through complaints, spot checks by the Internal Revenue Service, etc.

Walker emphasized that the Post-Freeze Program is fundamentally a voluntary program, since the pre-notification group is "not all that large in terms of numbers."

Speakers Selected For White House Future Conference

Six keynote speakers who will set the tone of the Feb. 7-9 White House Conference on the Industrial World Ahead: 1990, were announced last week by the conference co-chairmen, Secretary of Commerce Stans and Secretary of Labor James Hodgson.

Stans, Hodgson and Robert W. Miller, executive director of the conference, briefed members of the press on plans for the meeting which will be attended by more than 1,500 of the Nation's business, labor, academic and government leaders. President Nixon will address the group on opening day at the Sheraton-Park Hotel in Washington.

Looking in the future

Stans explained that the conference objective is to "get some of the best minds in the country together to take a look at what is likely to unfold" in the future. It will be a look beyond a three-year plan or five-year plan or any projection of present condition.

"Much of the Nation's business community today is so immersed in short-term matters and problems —urgent concerns involving government, prices, the environment, consumer affairs and other matters —that long-range considerations often suffer, with too little attention given to matters that will affect the long-term business relationship with society as a whole," Stans stated.

The Commerce Secretary said the whole thought of the conference is "when business, labor and government sit around in 1990 talking about problems of that day, what will they wish we had done."

Secretary Hodgson said like other sectors of our society the industrial world has often found itself in the midst of unforeseen forces.

TO SPEAK ON THE FUTURE—*Arjay Miller, dean and professor of Management, Graduate School of Business, Stanford University, will discuss "The Social Responsibility of Business."*

"If we are to solve the increasingly complex social and economic problems that will confront us in the next two decades, we must begin to examine them now," the Secretary of Labor concluded.

Theme-setting speakers are:

Dr. Willis Harman of Stanford, Calif., director of the Educational Policy Research Center, Stanford Research Institute, Menlo Park, Calif., and Herman Kahn of Chappaqua, N. Y., director of The Hudson Institute, Croton-on-Hudson, N.Y., who will speak on "An Exploration of the Future."

Dr. Walter Hoadley of San Francisco, executive vice president of Bank of America, San Francisco, whose topic will be "The Structure of the Private Enterprise System."

Arjay Miller of Woodside, Calif., dean of the Graduate School of Business, Stanford University, Stanford, Calif., will discuss "The Social Responsibility of Business."

Dr. Simon Ramo of Beverly Hills, Calif., vice chairman, TRW, Inc., "Technology and Resources for Business."

Max Ways of New York City, member, Board of Editors of Fortune magazine, "The Human Side of Enterprise."

Median Family Income Still Rising, But Cost Gains Offset Advances

For almost a quarter of a century, the median income of American families has been rising—and this trend appears to be continuing.

In 1970 it was about $9,870—approximately $440, or 4.6 percent, above the 1969 level of $9,430.

Commerce's Bureau of the Census, in a report on income in 1970 of families and persons in the U.S., says that of 51,948,000 families in that year, about half received income of more than $9,870 and half less than this figure. The Bureau says most of the information in the report was collected in March, 1971.

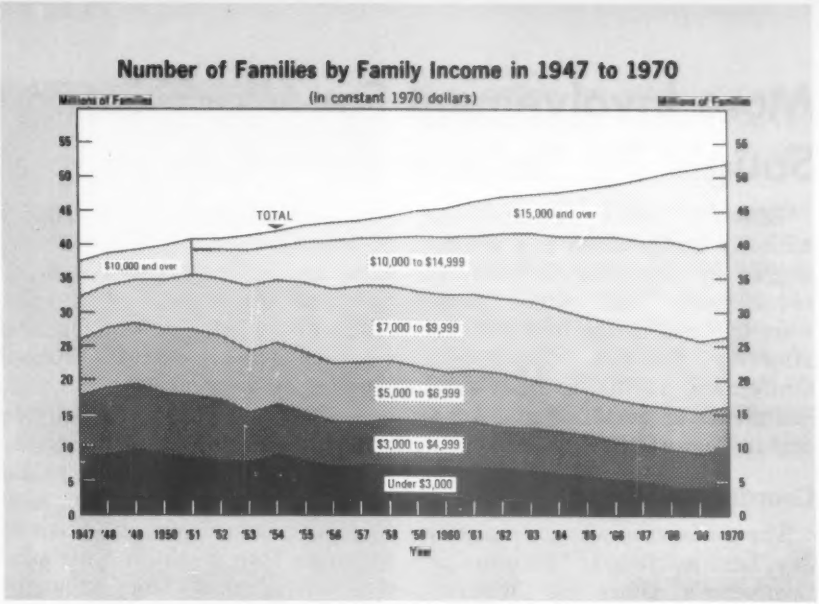
This information is based on a sample taken in the Bureau's Current Population Survey. About 50,000 households, scattered through 449 areas comprising 863 counties and independent cities, are designated in the survey for interview each month.

Consumer prices

In 1970, consumer prices were approximately 5.9 percent higher than in 1969. The Bureau adds, however, that in terms of constant dollars, median family income in 1970 was about the same as in 1969.

In the decade from 1960 to 1970, median family income in current dollars increased about $425 a year, or 76 percent. On an average annual rate basis, this was 5.8 percent. However, a good part of the advance reflected rises in consumer prices. In terms of constant 1970 dollars, the median income level increased about $250 a year, or 3 percent.

From 1947 to 1970, as shown by a chart compiled by the Bureau, the median income of American families nearly doubled in terms of constant 1970 dollars, while the number of families with incomes



of $10,000 or more a year jumped from about 14 percent of the total to nearly half.

Below the $10,000 level, the following breakdown is shown in incomes of all families: below $3,000, 8.9 percent of the total; between $3,000 and $5,000, 10.3 percent; between $5,000 and $7,000, 11.8 percent; and between $7,000 and $10,000, 20 percent.

In 1970, the median income of families of Negro and other races was $6,520, a gain of $330, or 5.3 percent, over 1969. The median income of families of Negro and other races was 64 percent of the median for white families in 1970, not significantly different from the ratio in 1969.

For men working full time in 1970, the median income was $9,180, 6 percent higher than in 1969. For women working full time, the median was $5,440, an increase of 7.1 percent over 1969. About 57 percent of the civilian male income recipients reported working year round full time in 1970 as compared with 59 percent in 1959.

—Census Bureau

Report Details Medical Industry's Challenges

The biomedical instrumentation industry's greatest challenge is to put its new discoveries to use in the diagnosis and treatment of disease, according to a new report issued by the Bureau of Domestic Commerce.

"Biomedical Instrumentation Used in Modern Health Care," provides a study of the role of biomedical instruments, major industries manufacturing equipment and uses of advanced biomedical instrumentation.

The publication states that the industry can play a positive part in the detection and prevention of disease and in providing the best possible medical care at the lowest cost.

"Perhaps the most immediate challenge lies in adapting and translating scientific and technological achievements into instruments and tools which the doctor and research analyst can use . . ." the report states.

The report was compiled by the Business and Scientific Equipment Division of BDC. It may be obtained for 40 cents a copy from Sales and Distribution, National Technical Information Service, Department of Commerce, Washington, D. C., 20230.

—Bureau of Domestic Commerce

More Involvement For Minorities Sought By Federal Committees

Effective ways of involving minority businessmen to a greater degree in supplying Government requirements and public needs were outlined in the first national Minority Business Opportunity Conference (MBOC), held early last month at the Air Force Academy in Colorado Springs, Colorado.

Coordinated thrust

The conference was convened by Jay Leanse, Deputy Director of Commerce's Office of Minority Business Enterprise (OMBE). Leanse said "the purpose of the meeting is to evaluate the progress of the Government's minority enterprise program over the past year, and formulate goals for the coming year."

"This conference," he added, "is indicative of the new coordinated thrust we are putting on the Government's minority enterprise effort and we expect to accelerate this emphasis in the immediate months ahead."

Due to the cooperation of at least 13 Federal agencies to make the sessions a success, attendance was larger than anticipated. Approximately 100 Federal members and others from 30 cities participated in the three-day meetings and workshops.

The conference produced a general outline of future action as well as discussion and clarification of new developments in the minority enterprise field. Primary decisions reached in the workshops were:

—The MBOCs will play a forward role in coordinating Federal efforts in the Small Business Administration (SBA) 8(a) contracting program. Under this program, SBA contracts directly with minority businessmen for all types of supplies, services and construction needs of other Federal agencies that submit their requirements to SBA for this purpose.

—New emphasis will be placed by MBOCs on identifying minority firms and offering them the opportunity to submit proposals to meet the requirements of Government agencies in a competitive atmosphere equal to all.

—MBOCs will take an active part in fostering local participation of major Government prime contractors in carrying out new Federal procurement regulations requiring them to obtain their subcontracting needs from minority businesses.

—Concerted efforts will be made by MBOCs to identify potential sites for concessions and to find minority firms interested in and capable of operating concessions on the sites that have been identified.

—In the area of minority construction contracting, MBOCs will take upon themselves the responsibility of organizing a local Federal effort to overcome the major obstacles of minority construction contractors, which are lack of contracting opportunity, the absence of seed capital, the inability to obtain surety bond, and the unavailability of management and technical assistance.

Obstacles faced

Speeches and discussion at the conference centered in a considerable degree on the obstacles that minority businessmen encounter in trying to participate in the mainstream of the nation's business activity, and in locating and sharing in opportunities for active involvement.

Ramon V. Romero, Deputy Director of the Business Opportunities Division of OMBE, traced the history of the Spanish-speaking people in America and described their basic characteristics. He pointed to ethnic and cultural differences that form barriers to full participation by Spanish-speaking

Jay Leanse
Deputy Director, OMBE

people in the nation's economic activity, and said such considerations are relevant to the general problem because of the importance of knowing people better.

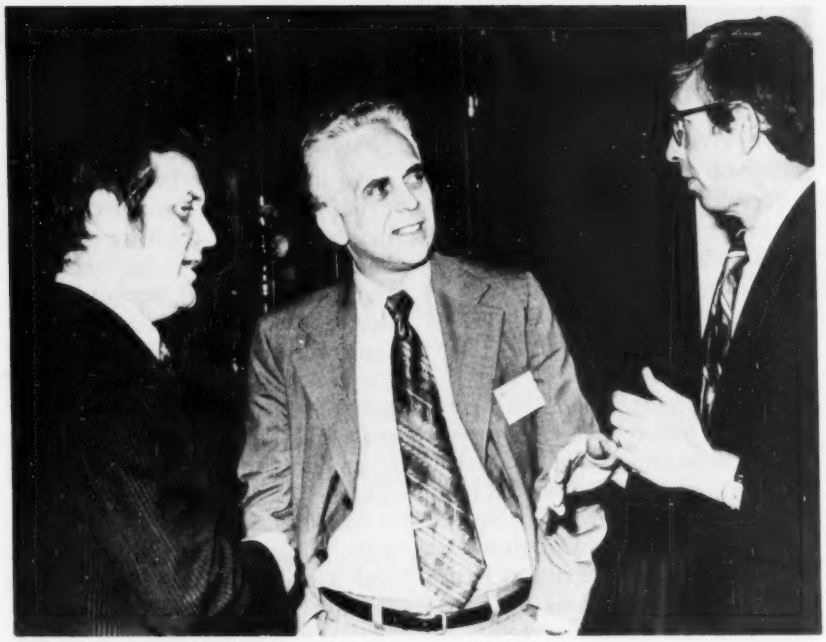
Romero expressed the hope that the 100,212 Spanish-surnamed controlled businesses now in the U.S. "will be only a milestone on our road to total economic integration."

"I would suggest," he added, "that there is no need for special programmatic efforts with respect to the Spanish-speaking. What is required is that a fitting share of current and new programs be focused on the Spanish-speaking. . .

"I can assure you that we Spanish-speaking will respond to your efforts and initiatives. With your help and interest, we will succeed."

Referring to the language problem, Romero said that recent Spanish-speaking arrivals from Cuba, Puerto Rico, and other Latin-American areas sometimes "have substantial educational and business talents" which go unrecognized by persons unaccustomed to accents, with the result that these people are judged suitable only for menial employment.

C. Lawrence Huerta, Deputy Assistant Director of Government Programs of the Coordination Division of OMBE, discussed the problems of the American Indian in becoming a participant in the nation's business activity. He pointed out that an Indian, growing up as a member of a tribe, learns to speak and think in a par-



MINORITIES DISCUSSED—*Participants in the first national Minority Business Opportunity Conference are shown from right, Thomas W. Carr, chief, Federal Executive Board, Secretariat, Office of Management of Budget, Washington; Israel Rubin, assistant director OMBE government programs coordination division, Washington; Gerald Marks, director, Office of Business Services' Chicago Field Office.*

ticular Indian dialect and acquires culturally prescribed behavior patterns that are different from and often opposed to those that are "taught and encouraged in the dominant American culture."

He suggested that the MBOCs should undertake to achieve the following objectives:

—Cooperate with all Indian-concerned organizations, local, statewide, and national.

—Make possible contacts between Indian individuals, tribal officials, or off-reservation leaders and those organizations and individuals who are interested in helping solve Indian business problems.

—Contact Indian leaders on and off reservations to learn their suggestions, and to explain procedures not clearly understood.

—Visit Indian governing bodies at their meetings and answer any questions and explain the functions of the MBOCs.

—Survey areas bordering reservations to determine the prevailing climate of cooperation and communications, and find ways of helping the Indian and non-Indian businessman get together.

—Report information on a regional basis that will help the various reservations have a better understanding of each other's progress and problems in the field of business ventures.

Huerta suggested also that MBOCs should create Indian subcommittees manned by knowledgeable and well-motivated individuals to determine how the following aims could be implemented in their areas:

—Coordinate public and private resources available to the Indian population into a program which produces substantial business opportunities for the Indian residents of the area.

—Develop programs that seek to overcome factors limiting Indian business development, such as a lack of understanding of the availability of State and local projects for Indian aid.

—Integrate the functions of existing programs to the end that the existing or potential Indian businessman can be better served by them, and undertake to coordinate the programs.

Huerta said that most of the businesses now on Indian reservations now are non-Indian owned. However, he pointed out, the Indian businessman has a clear advantage over the non-Indian in starting and running a business on a reservation because of low-cost land leases, and real estate and other tax breaks.

The tools needed

"What appears to be needed," he said, "is some local commitment and initiative to place the available tools in the hands of those that need it most—the American Indian businessman."

He commented that industries with a strong commitment to help the American Indian "have found such ventures very profitable."

MBOC membership consists of community organization representatives and regionally-based Federal employees who either are members of Federal Executive Boards (FEBs), or who report to the individuals heading up the regional offices they represent. President Nixon has given the FEBs the responsibility of decentralizing Federal programs in response to the needs of the communities in which the Federal agencies operate. MBOCs are concerned with the special needs of minority entrepreneurs in these communities.

In carrying out their tasks, the MBOCs are responsible to Secretary of Commerce Maurice H. Stans, under whose leadership the Government's minority business enterprise program was established. Stans commented that he "intended to give the highest priority to Federal assistance programs for members of minority groups, and to formulate other actions necessary to bring equal opportunity for all Americans to participate in the nation's competitive enterprise system."

—OMBE

Inquiries To Ombudsman Office Continue In Increasing Numbers

The response of businessmen to the new Ombudsman for Business Office in the U.S. Commerce Department is continuing to be both one of surprise and appreciation, said Secretary Stans.

Six months' report

The Secretary, referring to a report of the first six months of the office's operation, pointed out that to date the Ombudsman has handled more than 1600 inquiries from businessmen, officials from all levels of governments, trade associations, service organizations, attorneys, and C.P.A.s, among others.

The Ombudsman Office was established in the Commerce Department April 1 to give business a central point within the Federal structure where it could bring its questions, requests for information, and even its complaints and criticisms.

Thomas E. Drumm, Jr., the Ombudsman, said that it is the first government-wide service of its type. "Businessmen," he emphasized, "know that the Federal Government has set up many programs of benefit to them."

"However," he continued, "these same businessmen often do not know what the programs are, or where to go to find out information about them. The Ombudsman Office, acting as a one-stop service for them, is helping to solve this problem."

Other Federal departments and agencies are giving the Ombudsman full cooperation. Fifteen have established liaison relations with him through nineteen senior officials who assist the Ombudsman on all matters that involve the jurisdiction of their departments.

He also said that the 42 field offices of the Commerce Department, located strategically throughout the country, have been invaluable in giving on-the-spot service in follow-up and consultations.

Secretary Stans noted that the responses to inquiries through the Ombudsman and the liaison process have resulted selectively in improved Government program performance and delivery of Government services.

"For example," said the Secretary, "the 'good offices' approach of the Ombudsman has resulted in clarification of misunderstandings between Government agencies and the business public. And, practices and procedures in particular situations of which business has complained have been corrected or explained."

Removing obstacles

The Ombudsman said that in one case, his office stimulated conferences that resulted in obstacles to exports of certain U.S. products being reduced and some removed, allowing potential penetration for this commodity. This resulted in opening the way for U.S. competition in foreign markets that presently import several billion dollars per year of this product.

Typical inquiries to the Ombudsman Office include questions concerned with Government procurement planning and practices, contract awards, how-to-sell to the U.S. Government, how to get on bidders lists, industrial and economic development, Government loans, guarantees and grants, industrial pollution abatement, commodity standards, product safety, metrication, franchising, patents, and marketing and distribution.

The Ombudsman also has answered queries on economic stabilization measures, surplus property, truth-in-lending and advertising, foreign trade, non-tariff barriers, foreign market data, joint ventures and licensing abroad, import impact, trade with the Soviet Bloc and China, among some others.

Forty-nine states and 16 foreign countries are listed in the Ombudsman files. The Ombudsman has responded to firms or individuals in all of them. Users of the service have included the business public, firms of all sizes, minority enterprises, academe, trade associations and other trade related organizations, professional societies, students, attorneys, CPAs, Washington representatives, members of Congress, economic and industrial development and other entities of state and local governments, banks, Chambers of Commerce, and others.

Any businessman wanting help with his dealings with the Federal Government should contact Thomas E. Drumm, Jr., The Ombudsman for Business, Washington, D.C. 20230. Telephone: 202-967-3178.

—Office of the Secretary

Business Calendar

Nov. 9—Los Angeles—Seminar on Containerization, sponsored by the Freight Traffic and Maritime and Harbor Affairs Committee of the Los Angeles Chamber of Commerce.

Nov. 14-19—Reno, Nev.—American Congress of American Indians. For information contact the Congress of American Indians, Washington, D.C., Phone: 202-223-4155.

Nov. 15-17—Bal Harbour, Fla.—Maritime Trade Department, AFL-CIO, Biennial Convention, R. J. Blackwell, Deputy Assistant Secretary of Commerce for Maritime Affairs, will speak.

Nov. 15-19—Kansas City, Mo.—Plant Layout and Facilities Planning, work course sponsored by University of Kansas. For information contact Howard C. Hamilton, coordinator, University Extension Center, Kansas City, Kan. Phone: 913-262-1555.

SCIENCE & TECHNOLOGY REPORT

- Pollution reports cite progress
- Airway Fix Files to assist FAA
- Concern grows for passenger elevator safety
- Capitol Hill is being surveyed
- Patents of special interest

Pollution Control Council Reports Cite Progress In Three Industries

Industry's far-ranging actions in three particular areas to reduce and control environmental pollution, and the deep and formidable problems involved in these efforts, are detailed in three progress reports submitted to Commerce Secretary Stans by the National Industrial Pollution Control Council.

The Secretary forwarded the reports to President Nixon and Russell E. Train, Chairman of the Council on Environmental Quality. The industrial areas covered are electrical power, fertilizers and agricultural chemicals, and rubber. Sub-councils representing each of these industrial groups prepared the reports.

Investor-owned electric utility companies this year are spending approximately $36 million on environmental research and development, the electric power report points out.

The report adds that outlays on environmental problems, including capital and operating expenditures as well as research and development, will total $680 million, and that this sum will be increased by research and development work of component manufacturers.

Regarding coordinated, industry-wide research and development, the report says:

"Well before the environment became a national concern, utilities began pooling their experiences with environmental and pollution problems and in many cases undertook joint research programs aimed at providing solutions before problems of serious proportions developed."

Changes in aquatic ecology

More than 230 studies are under way or planned by investor-owned electric utility companies to determine whether any noticeable changes have occurred in the aquatic ecology at completed installations using the one-through cooling method, which because of its economy is preferred where large volumes of cooling water are available and acceptable changes in the ecology are not exceeded.

Many studies have shown that the effects of warm water discharges on the ecology are localized and even beneficial. The principal effects observed are almost entirely related to changes in which warm water species of aquatic life replace cold water species in a relatively small area near the discharge. On very small bodies of water, it is often necessary to install supplementary cooling to retain the type and diversity of aquatic species at original levels.

A projection of national growth in electric power indicates that fossil-fueled systems will continue to be the principal electric generating method through 1990, but that nuclear-fueled systems will increase their share of the output

from less than one percent in 1965 to nearly 38 percent in 1990.

Methods have been successfully developed to reduce the volume of wastes from processing the fuel from nuclear plants, and to convert them to solid form. The reduced volume of wastes accumulated by the year 2000 can easily be accommodated under storage systems now planned. Salt formations 1,000 feet below the surface of the earth appear to provide the safest place of storage.

High stacks

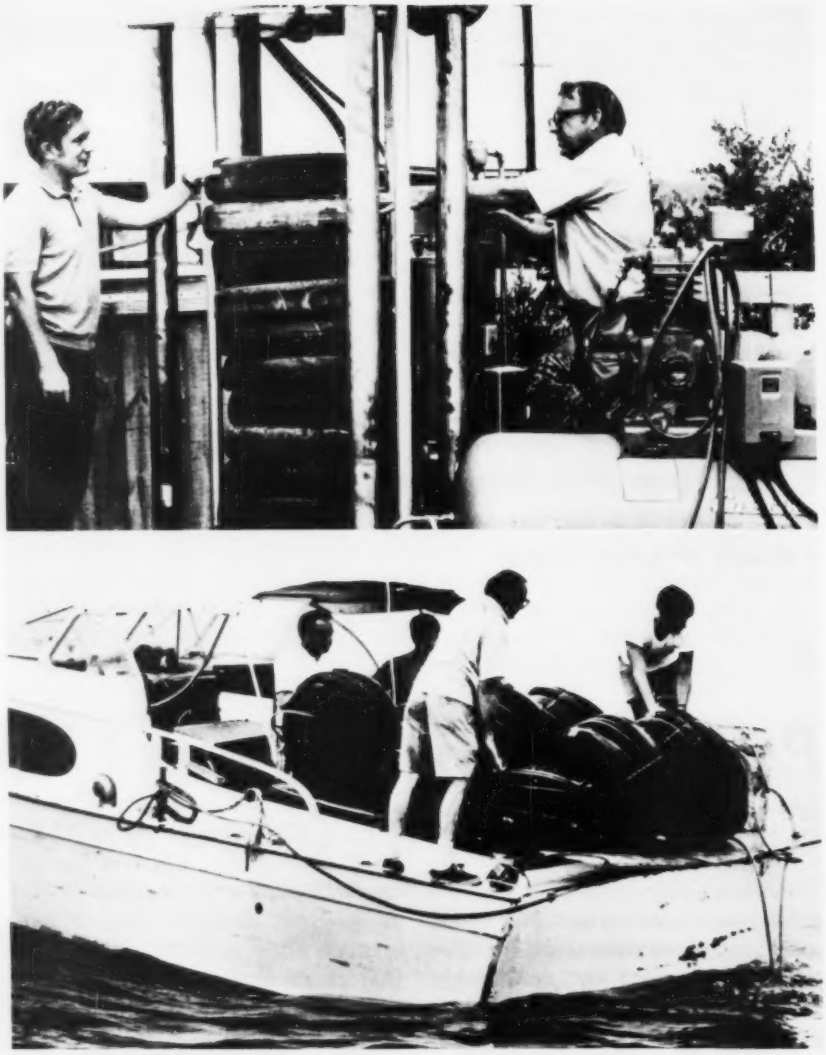
Much of the research and engineering efforts of utilities on air quality are directed toward controlling the formation and emission of oxides of sulfur and nitrogen and particulate matter. In the absence of better means for reducing these emissions, high stacks promote natural assimilation and limit ground level concentrations.

The report on fertilizers and agricultural chemicals says that many phosphate fertilizer plants have installed precipitators and mist eliminators to reduce sulfur dioxide emissions from their stacks, and that more modern plants use the double conversion process, which curtails emission to as low as 500 parts per million. This compares with 1,500 to 2,500 parts per million from most of the plants.

Bag collectors

Newer units now being installed are said to virtually eliminate nitrogen oxides from effluent gases, but commercial performance data on these units are limited.

Electrostatic precipitators and bag collectors currently in use have been unable to meet existing removal standards for particulates released by phosphate rock drying and grinding facilities, and extensive development by equipment manufacturers will be required to further reduce emissions. In dry fertilizer processing and sizing plants, many units are equipped with systems to control particulate emissions.



TIRES FOR TUNA—*One method B. F. Goodrich has found to dispose of scrap tires is to compress them into 18-inch-high bales with a tire compression machine (top) and drop them into the sea (bottom) to build an artificial reef off Myrtle Beach, S.C. Rubber-reef homes, attractive to fish, barnacles and other marine life, could result in the efficient disposal of millions of scrap tires, the company says.*

Ammonia plants of new design are expected to give a loss of half a pound of nitrogen per ton of ammonia produced, about five percent of the loss from plants built 25 years ago. Emissions of fluorine compounds is by far the most difficult and expensive to control of pollutants from fertilizer manufacturing, but various scrubbing processes are effective. Gypsum accumulated in superphosphate production normally is impounded in large settling basins, and extensive work has been done to minimize pollution hazards from possible dam breaks.

The report makes these recommendations with regard to fertilizers: standards should be set for maximum acceptable levels of effluents from mines and plants producing fertilizer materials; target standards more strict than those initially attainable should be fixed when progress enables industry to convert; close industry-government cooperation is required if speedy progress is to be made; a significantly expanded program of moni-

toring and enforcement of air and water quality standards must be undertaken by appropriate authorities.

The report on rubber points out that one of the most pressing problems confronting the industry is the disposal of 200 million tires worn out annually by U.S. motorists.

Pilot plant operations show that recycling of scrap tires into various commercial uses is possible, though probably at an economic penalty. A program involving the utilization of ground-up scrap tires in the production of carbon black, one of the key ingredients in new tires, has been completed successfully on a pilot plant basis. Experiments are being made on conversion of scrap tires into reusable chemicals and raw materials for recycling into various manufacturing processes. Other possible uses for tires include as road surfacing material, as impact barriers along highways, and as artificial ocean reefs.

To reduce sulfur oxide and particulate pollution, the industry is converting coal-burning boilers to gas or oil as rapidly as possible. New or improved water treatment facilities, operating in most major plant locations, incorporate separators, skimmers, settling ponds, solids-removal equipment, and aerators, and where necessary chemical or biological treatment is utilized. A great deal of research effort is focusing on removing unpleasant odors, particularly at rubber reclaiming plants in metropolitan areas. Where possible, scrap rubber residue from trimming and cutting operations is reworked or resold for other uses.

These reports, entitled *The Electric Power Industry* (25 cents), *Fertilizers and Agricultural Chemicals* (30 cents), and *Rubber* (20 cents), can be purchased by check or money order from: The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. —*NIPCC*

Concern Grows For Passenger Safety In Elevators Of Burning Buildings

How safe are elevators in a burning multi-story building?

If functioning properly, they should be able to evacuate people and bring firefighters and their equipment to the scene of the blaze.

However, Thomas G. Lee, of the Building Research Division of Commerce's National Bureau of Standards, investigating five different types of elevators in current use, found that most elevators would not close their doors and leave the floor on which the fire occurred. In one system he found that all elevators would be automatically called to a fire-affected floor and would be unable to leave it.

There has been growing concern about the safety of elevators in such situations in recent years because of the proliferation of multi-story office and apartment buildings in which elevators play a major role in moving people.

The NBS study was made with the cooperation of the General Services Administration's Public Building Service and measurements were conducted on 12 elevators in Federal buildings in Washington.

Beam of light

All automatic passenger elevators contain some means of insuring that the doors do not close on passengers entering or leaving the car. This is usually accomplished by aiming a beam of light across the door opening to a photodetec-

ELEVATOR SAFETY—*Whether or not automatic elevators will function to evacuate personnel from a burning multi-story building is the subject of an investigation at the National Bureau of Standards. Some elevators have been found unable to close their doors and leave the floor on which the fire occurs because of fire and smoke.*

tor. Any interruption of the beam, such as a passenger standing in its path, causes the doors to reopen.

Some elevators prevent abuse of this system by a force-close feature that after a preset time (about 30 seconds) closes the doors with reduced force. Part of the NBS study was to determine the level of smoke that would keep elevator doors open and if the force-close feature would return elevators to service.

It was found that a fire producing volumes of smoke near the elevator door would very likely prevent the elevator door from closing.

Force-closing systems

Eight of the 12 elevators tested had force-closing systems, but only half of the eight were operative. They would start to reclose the door after it was open an average of 31 seconds; only these four could return the elevator to service following a stop at a very smoky floor.

Another feature of many modern elevators could cause them to seek a fire-involved floor. This is the electronic touch-type call button, the button pressed to call an elevator. This type of button is not depressed to complete an electrical circuit. The switching is accomplished by the change in electrical capacitance when any part of a body contacts it.

Unfortunately, the touch-type button can be activated also by a flame playing on it momentarily, calling the elevator to a fire-involved floor. Flames that activated it were a ¾-inch-high flame from a wooden safety match, a 1½-inch flame from a butane cigaret lighter, and flame from burning paper.

Two of the elevators had smoke detectors mounted on top of the elevator car, in the shaft. When the smoke in the shaft became thick enough these elevators would perform a preset sequence of operations, such as closing the doors, ignoring all calls, and returning to the main floor to await instruction from an operator with a key.

—National Bureau of Standards

Airway Fix Files To Assist FAA Automate Traffic

Geographical coordinates for specified points along the high and low altitude airways of the National Airspace System are being provided by Commerce to the Federal Aviation Administration to assist that agency provide planned automated air traffic control service from takeoff to landing.

The National Ocean Survey of Commerce's National Oceanic and Atmospheric Administration is furnishing the coordinates or Airway Fix Files, as they are known. The files are listings which describe the air routes as a series of geographical positions or fixes, listed in the order that they occur along each route from beginning point to termination point.

The listing will be revised, printed, and distributed to each Air Route Traffic Control Center to coincide with revisions to the National Airspace System which become effective every 28 days.

The data in the file provide the basic information required by the computer system in the Air Route Traffic Control Centers to facilitate the clearance of Instrument Flight Rules (IFR) flight plans for U.S. aviation.

Automation accomplishes this by processing all IFR flight plans, listing those that have been incorrectly submitted and processing those correctly filed. It also assists in the revision of the incorrect submissions, and displays processed data at control positions.

The preparation of the Airway Fix File required the utilization of automated procedures in order to meet the rigid time schedules, the large workload and accuracy of the mathematical computations. This was accomplished by the Aeronautical Chart Division with the assistance of the Electronic Computing Division, both components of the National Ocean Survey.

The system design in current use is an interim procedure to meet FAA's immediate needs. As FAA expands its requirement to include the low and high altitude Area Navigation routes, Standard Instrument Departure routes, Standard Arrival routes, special coded

AIRWAY FIX FILES—*National Ocean Survey is providing FAA geographical coordinates for specified points along the high and low altitude airways of the National Airspace System to assist in the provision of planned automated air traffic control service from takeoff to landing.*

routes, and future navigational systems under development, a more sophisticated data processing system may have to be developed.

The low and high altitude Airway Fix Files include more than 700 airways and more than 13,000 fixes. Both files are revised every 28 days. —*NOAA*

Presidential Committee Appointed To Advise On Seas, Atmosphere

A new National Advisory Committee on Oceans and Atmosphere has been appointed by the President to conduct a continuing review of the progress of the nation's marine and atmospheric science and service programs.

Established by Public Law 92-125 of August 15, 1971, the committee will advise the Secretary of Commerce with respect to the National Oceanic and Atmospheric Administration, submitting a comprehensive report to the President and the Congress by June 30 each year.

Chairman is Dr. William A. Nierenberg, Director of the Scripps Institution of Oceanography at La Jolla, Calif. Dr. William J. Hargis, Jr., Director of the Virginia Institute of Marine Science, and chairman of the Coastal States Association, has been named Vice Chairman.

Other members of the committee are:

Charles F. Baird, Vice President, International Nickel Co.; Wayne Burt, Dean of Research, Oregon State University; Charles L. Drake, Professor of Earth Sciences, Dartmouth College; Thomas A. Fulham, President, Boston Fish Market Corp.; Brig. Gen. Joseph J. George, USAF-Ret., Director of Meteorology, Eastern Airlines; Thomas F. Malone, Deputy Foreign Secretary, National Academy of Sciences and Vice President, University of Connecticut.

William D. Carey, Arthur D. Little Corp.; Dayton H. Clewell, Senior Vice President, Mobil Oil Corp.; John P. Craven, Dean, University of Hawaii; Francis S. Johnson, Acting President, University of Texas; Ralph A. MacMullan, Head, Department of Natural Resources, State of Michigan; Mark Morton, Vice President, Aerospace Group, General Electric Co.; John J. Royal, Secretary-Treasurer, Fishermen and Allied Workers Union; Julius A. Stratton, Board Chairman Ford Foundation.

Werner A. Baum, President, University of Rhode Island; John C. Calhoun, Vice President, Texas A&M College; Gilbert M. Grosvenor, Editor and Vice President, National Geographic Society; O. William Moody, Jr., Administrator of the AFL-CIO Maritime Trades Dept., and Vice President of the Seafarers International Union; Verner E. Suomi, Director, Space Science and Engineering Center, University of Wisconsin; Edward Wenk, Jr., Professor of Engineering and Public Affairs, Aerospace Research Laboratory, University of Washington; Clement Tillion, Member Alaska State Legislature; Myron Tribus, Vice President, Xerox Corp.; and Rear Admiral Odale D. Waters, Jr., USN-Ret., Department of Oceanography, Florida Institute of Technology.

Cable TV System To Provide Weather, Time To Customers

A cable television company in Fort Walton Beach, Fla., is installing a new system to enable its subscribers to tune their television sets to a particular channel on the screen to obtain the correct time and the latest weather forecast for their area.

Called an automatic cablecasting system, it is tied in to the NOAA Weather Wire Service teletypewriter circuit from which it selects automatically only those forecasts concerning the extreme northwest Florida area, storing each forecast until it is updated by a subsequent one.

It is expected that this service will expand to other areas served by cable companies in the future. —*NOAA*

Biennial Symposium Set

Radiation detectors which play an important part in the advancement of medicine, interplanetary space science, and environmental science are the subjects of the 13th Scintillation and Semiconductor Counter Symposium to be held March 1-3, 1972, at the Shoreham Hotel, Washington, D.C.

Sponsors for this biennial event are the Nuclear Science Group of the Institute of Electrical and Electronics Engineers, the Atomic Energy Commission, and the National Bureau of Standards.

Surveyors To Measure Capitol Hill Elevation

To determine whether the massive 8,909,200-pound weight of the nation's Capitol has caused the site on Capitol Hill in Washington to sink, a team of Commerce Department surveyors is measuring the height of the hill with instruments so precise they can determine elevation within an accuracy of half an inch.

The measurements are being conducted by the National Geodetic Survey, a component of Commerce's National Oceanic and Atmospheric Administration. The first measurements were made 87 years ago by a predecessor agency, the U.S. Coast and Geodetic Survey. A bronze plate marking the deed is located under the first window of the southeast corner of the Capitol, in the Senate wing.

The current survey is part of a larger project being undertaken by the agency involving checking three routes within the District of Columbia which radiate from the Capitol.

The routes are part of a leveling network which will connect tide gages along the shores of Chesapeake Bay and adjacent river estuaries being surveyed for the Army Corps of Engineers, which is conducting an evaluation of the Bay's resources. The evaluation may lead to a plan for the maintenance and enhancement of the Chesapeake Bay's environment.

The NOAA survey, a seven-month program begun in May, is being carried out by a 29-man party headed by Robert R. Gerrish of Potsdam, N.Y.

The elevation of Capitol Hill was last measured in 1926 by the D.C. Bureau of Public Buildings and Public Parks. According to the Congressional Directory, "the Capitol is situated on a plateau 88 feet above the level of the Potomac River." The 1926 survey found the height varied between 87 and 90.5 feet above sea level. —*NOAA*

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

Floor structure. An improved floor structure assembled from concrete and building construction panels of unique design. The panels are assembled in side by side interengaged relation. The upside of the assembled panels presents a number of troughs having deformations and keying elements. The overlaying concrete is united with the panels as a composite floor structure capable of developing improved load-carrying capacities. The underside of the assembled panels presents a number of channels which may be adapted to provide any one of a variety of finished ceiling arrangements. Patent No. 3,608,267 issued to Bernard E. Curran, Sewickley, Pa., and assigned to H. H. Robertson Company, Pittsburgh, Pa.

Mower. A gang mower assembly is connected to a lawn and garden tractor having a rotary mower suspended beneath and includes a draft frame rigidly connected to the rear of the tractor, a pair of transversely extending draft tubes pivotally connected to the opposite sides of the draft frame for vertical pivoting movement and a pair of wheeled rotary mower units connected to the draft tubes for vertical pivoting movement. The mower assemblies are provided to move the mower assemblies between extending working positions and retracted transport positions. Patent No. 3,608,284 issued to Leon Paul Erdman, Beaver Dam, Wis., and assigned to Deere & Company, Moline, Ill.

Neutral system for riding mowers. A neutral start electrical system prevents the engine on a riding mower from starting unless the mower is disengaged and the vehicle drive is disengaged. This system is based on a switch in the engine ignition circuit which normally completes the ignition circuit through an auxiliary circuit, but which removes the auxiliary circuit from the ignition circuit when the engine is running. The auxiliary circuit includes first and second additional switches in series with each other. The first additional switch is responsive to a condition of the clutch for the vehicle drive and is open when the vehicle drive is engaged. The second additional switch is responsive to a condition of the clutch for the mower drive and is open when the mower drive is engaged. The neutral start electrical system provides an open ignition circuit if an attempt is made to start the engine while either the vehicle clutch or mower clutch is engaged to thereby prevent starting of the engine. Patent No. 3,608,285 issued to Martin Adolph Berk, Horicon, Wis., and assigned to Deere & Company, Moline, Ill.

Cotton harvester. A cotton harvester having a pair of plant stripper rollers, each having adjacent underposed stripper sheets coacting to provide cotton stripping action, each sheet having a surface for doffing and catching repeating cotton and mounted to move in conjunction with its respective stripper roller so that the sheet is yieldably movable relative to that roller to maintain a substantially constant clearance. Patent No. 3,608,289 issued to James M. Frances, Bettendorf, Iowa, and assigned to International Harvester Company, Chicago, Ill.

Smog free automobile. A smog-free automobile which burns fuel, pure oxygen and spray water which cools the cylinder walls and pistons during exhaust. A dual combustion system is utilized, Otto cycle for cruise power and diesel cycle above cruise power and water is recovered from the exhaust. The fuel can be pure hydrogen or liquid gasoline and with hydrogen fuel, both hydrogen and oxygen can be produced by electrolysis, ideally utilizing nuclear electric generation for a complete smog-free system operation. Gaseous material is stored in a number of high pressure vessels and in the case of hydrogen fuel with the pressure vessels at the rear of the auto. Separate sets of vessels are provided for cruise power supply and above cruise power supply and valving is provided to use the opposite set of tanks in case fuel for one operation is exhausted. Patent No. 3,608,660 issued to Richard D. Smith, Palo Alto, and Dale A. Furlong, Menlo Park, Calif., and assigned to Combustion Power Company Inc., Palo Alto, California.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C.

Science Calendar

Nov. 7-12 and Jan. 9-14—Boulder, Colo.—University of Colorado. Workshop on "The Management of Technology: Effective Management of Engineers and Scientists." Sponsored by the university's Center for Management and Technical Programs.

Nov. 12-13—Gaithersburg, Md.—National Bureau of Standards. Association of Computer Program Analysts, Potomac Valley Chapter.

Nov. 30-Dec. 1—Gaithersburg, Md.—National Bureau of Standards. Workshop on display terminals for teleprocessing and wired cities.

March 1, 1972—Gaithersburg, Md.—National Bureau of Standards. IEEE Computer Society.

November 1, 1971

International Commerce

- National Foreign Trade Convention program
- North Africa's markets—two reports
- Expansionary course in Canada
- Stabilizing trend in Philippines
- Growth, setbacks in Uruguay
- Foreign investment offices in U.S.

U.S. Firms Keep Overseas Trade Centers Busy Between Scheduled Exhibitions

Newsmemo

It's farewell to the seas for the N.S. SAVANNAH, world's first nuclear powered merchantman, but the concept of moving cargo between nations by nuclear propulsion will carry on. The experimental design of the SAVANNAH made it too expensive for merchant service. But Secretary of Commerce Stans has announced an extensive research and development program underway in the Maritime Administration to work out more efficient and economical nuclear propulsion systems. American-flag operation of second generation nuclear merchantmen is a distinct possibility, if not a probability, he said.

Relationship of U.S. exports and imports to the country's entire domestic output is shown in detail, commodity by commodity, in a new Census Bureau report. Eleventh in a series, the publication gathers data through the year 1968, and compares it with the previous year and with the average of the four previous years. The 202-page report, "U.S. Commodity Exports and Imports as Related to Output, 1968 and 1967" (ES2-11) is available at $1.75 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, or the various Commerce Business Service Field Offices.

A gold mine for companies planning trade show exhibitions is the verdict of Commerce's overseas exhibit design chief Joseph W. Adams on a new booklet by a New York exposition management firm. He refers to "Reducing Exhibiting Costs--A New Approach," available from Clapp & Poliak, 245 Park Avenue, New York, N.Y., 10017. Exhibit costs reflect the economy no more nor less accurately than do other costs, says Clapp & Poliak, and "exhibitors' lack of knowledge (and doubtful judgment) are an important cause of excessive costs and complaints." Clapp & Poliak's "Golden Rule" is to complete everything possible at the plant or display builder's shop, rather than at the show site.

An Illinois university has looked at the State's high ranking in exports, also at the steep postwar climb in U.S. overseas business investment, and initiated a new course in international business. Northern Illinois University is offering the program to its students in the College of Business department of marketing. "The trend to the internationalization of business is certain to continue, and with it the need for more personnel trained to manage international operations," believes Dr. Paul O. Groke, who heads the new program.

"Proteccion Total M-S-A, Catalogo en Espanol," is the effort of still another export-minded U.S. firm to approach overseas customers with full information in their own language. The 48-page catalog has a striking graphic accompaniment to the Spanish text that is effective in any language. It has been produced by the international division of Mine Safety Appliances Co., in Pittsburgh.

International Trade Winds

CONSTRUCTION—The Korea Engineering Co. Ltd., which is jointly owned by the Lummus Co. of Bloomfield, N.J., and Korean interests, has been awarded the design, procurement and construction contracts for an $8 million, 60,000 barrels per day crude unit by the Korean Oil Corp. The new unit, which will be designed with an expansion capacity to 105,000 barrels, will be located at Korea Oil's large refinery complex at Wulsan, Korea. It is scheduled to be brought onstream in 1972.

INDUSTRIAL DEVELOPMENT—Two subsidiaries of International Telephone and Telegraph have merged with three Jamaican companies to form a new corporation—known as National Continental Corp. Ltd.—that will undertake manufacturing, marketing and development enterprises. Involved in the new venture are ITT Continental Baking Co. and ITT Levitt Inc. The Jamaican firms are National Continental Foods Ltd., National Packaging Corp. Ltd., and Key Homes Ltd.

MAGNETIC EQUIPMENT—Anglo-Thai Engineering, Ltd., Bangkok, will serve as sales agent in Thailand for magnetic equipn.ent produced by Eriez Magnetics of Erie, Pa. and Eriez manufacturing affiliates in Japan and Australia. Anglo-Thai Engineering will handle Eriez equipment designed to lift, hold and handle steel; convey ferrous parts, cans or scrap; increase recovery of minerals from ore; prevent tramp iron damage to machinery; protect food products from iron contamination; and feed bulk materials for mixing, weighing, bagging and batching.

New U.S. Economic Policy To Be NFTC Meeting Focus

Major attention will be given to the New Economic Policy of the United States and its impact on international trade and investment at the 58th National Foreign Trade Convention Nov. 15-17 in New York.

The program lists industry and government speakers from Brazil, Great Britain, Japan, the United Nations, and the International Monetary Fund, as well as the United States. Nearly 2,000 private businessmen, government officials and educators are expected to attend.

Firestone, Scott to speak

Raymond C. Firestone, chairman and chief executive officer of the Firestone Tire & Rubber Co., will deliver the keynote address as chairman of the national convention committee.

Harold B. Scott, Assistant Secretary of Commerce for Domestic and International Business, will discuss "Current Trade Questions" at a panel session. Philip H. Trezise, Assistant Secretary of State for Economic Affairs, is also a member of the panel.

Eximbank President Henry Kearns will be presented with the 1971 Captain Robert Dollar Memorial Award at the convention's World Trade Dinner. Another Eximbank leader, director Tom Lilley, is a convention speaker.

The Dollar Award, 34th in an annual series, will be presented to Kearns by John G. Montag, vice president of the Caterpillar Tractor Co. Recent award winners include bankers David Rockefeller, George S. Moore and Rudolph A. Peterson, and industrialists William Blackie and Thomas J. Watson, Jr. Harold F. Linder, a previous Eximbank President, was honored in 1968.

Rep. Wilbur D. Mills of Arkansas, Chairman of the House Ways and Means Committee, will address a general session. Others from Washington on the program are Nathaniel Samuels, Deputy Under Secretary of State for Economic Affairs, and Robert T. Cole, International Tax Counsel, Treasury Department.

Robert V. Roosa, partner of Brown Brothers Harriman & Co., and a former Under Secretary of the Treasury for Monetary Affairs, will address the World Trade Dinner.

The Americas Luncheon will be addressed by Israel Klabin, a leading industrialist of Brazil. The Pacific-Asia Luncheon will be addressed by Eikichi Itoh, head of one of Japan's major trading companies. The Europe Luncheon will include a talk by the Earl of Cromer, British Ambassador to the United States, who is a former governor of the Bank of England.

Speakers at general sessions include Ian MacGregor, chairman and chief executive officer of American Metal Climax, Inc.; Lee L. Morgan, executive vice president, Caterpillar Tractor Co.; Antonie T. Knoppers, president, Merck & Co., and Maurice F. Strong, Secretary General of the 1972 United Nations Conference on the Human Environment.

Robert J. Dixson, vice chairman, Johnson & Johnson International and chairman of the National Foreign Trade Council, convention sponsor, heads a roster of distinguished American business leaders who will preside at convention sessions.

PHOTO ON PAGE 33—The Paris U.S. Trade Center, in operation since November 1969, recently noted its 100th display by U.S. companies between its regularly scheduled trade exhibitions. The centenary promotion was organized by the French agent, Techmation S.A., which represents 9 U.S. firms. Shown, from left, are engineering director Fred Tischler of Texas Instruments, Houston; Trade Center Director George Borrowman; Techmation's director Jacques Bargain, and president A. F. Tilley of Input/Output, Houston. A story on how U.S. firms can use U.S. Trade Center facilities between shows is on Page 39.

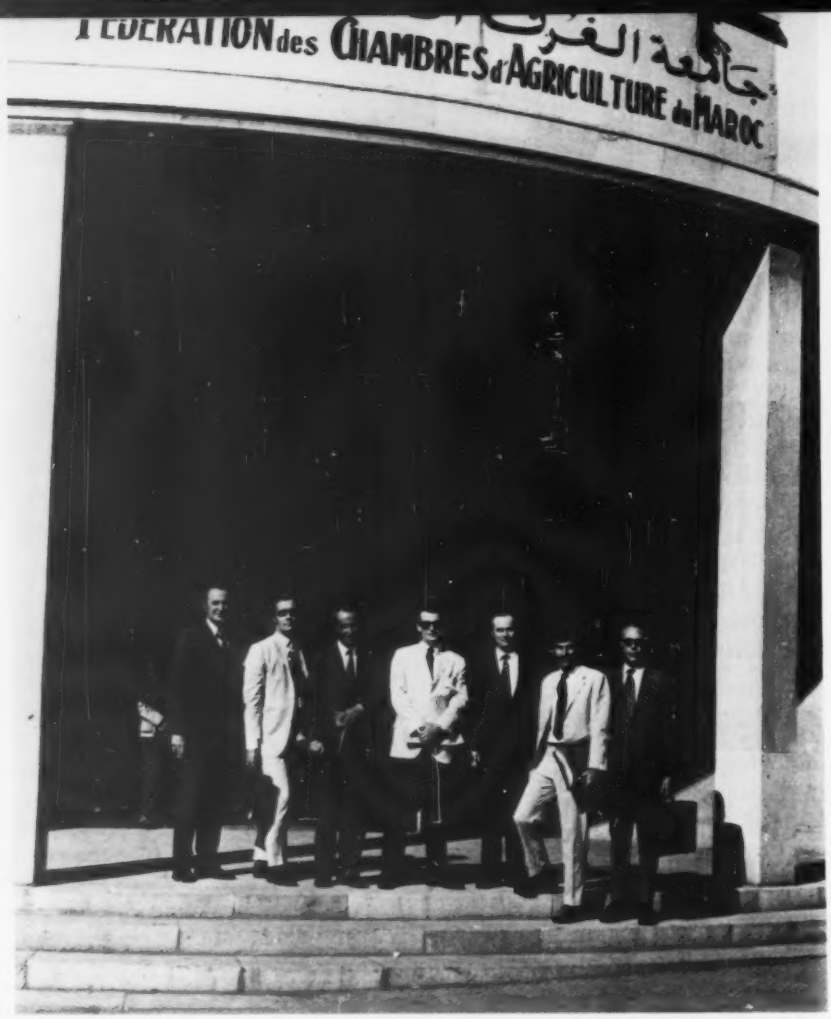
Arizona REEC Plans Sessions On Trading With Soviet Union

A conference on trading with the Soviet Union is to be held Nov. 30 in Phoenix—under the joint sponsorship of the Arizona Regional Export Expansion Council, Thunderbird Graduate School for International Management, and Arizona World Trade Association.

Two trade experts from the USSR Embassy in Washington, together with a panel of representatives from U.S. commerce and industry and the U.S. Department of Commerce, will be featured. Among the speakers will be Rauer Meyer, Director of the Commerce Department's Office of Export Control, who will discuss export controls and procedures for clearance of shipments to Eastern European countries.

According to chairman Jack Scott, a member of the Arizona REEC, "the conference is open to all manufacturers, exporters and world traders interested in expanding activities into the Russian marketplace."

The registration fee is $35. Write: Don W. Fry, Executive Secretary, Arizona REEC, U.S. Department of Commerce Field Office, 5413 Federal Bldg., 230 North First Ave., Phoenix, Ariz., 85025.



IN MOROCCO—*Mission members leave Government building after talking with agricultural officials. Mission Director John R. Peters is at right.*

Agricultural Development Mission Reports On North African Markets

To sell agricultural machinery and services in Algeria, Libya, and Morocco, U.S. traders should keep an eye on the evolving trade patterns and the particular business climate in each country.

This is the finding of a recent agricultural development trade mission organized by the Commerce Department to explore sales prospects in these North African nations.

Though trade channels differ from country to country, a broad-brush picture of the three markets would reveal certain common denominators, Mission Director John R. Peters reports. Peters is an international trade specialist in the Commerce Department's Minneapolis Field Office.

All three countries, he points out, have large land areas with relatively small populations—agricultural societies whose basic industrial, and even agricultural, needs have not been fully met. Each country has an orientation toward Europe as a supplier of goods and educator of technical experts, managers, and Government officials. Central planning is another common features of these economies, with agricultural, industrial, and infrastructural priorities reflected in national budgets.

U.S. capital goods and technology are favorably received and their quality recognized. Funds are available for capital purchases but competition from third-country suppliers will continue to be intense. Agricultural development programs, in various stages, may be supported by diverse financial institutions or agencies including the Government central banks themselves. The U.S. Agency for International Development and international organizations have been particularly active in supporting various Moroccan agricultural development projects.

Structures differ

Political and economic structures, central planning, budgetary priorities, stages of agricultural development, financial strength, and investment needs differ in degree and kind among the three countries.

"Most mission members were disappointed by the immediate results of their visit," Peters reports, "but were more optimistic about the possible long-term outlook for sales of their agricultural equipment and services, realizing that the foot-in-the-door visit may assist them in taking prompt action as opportunities aries."

Algeria: long-term prospects

The Algerian Government has established a monopoly on import purchases of farm equipment. Its current four-year plan places heavy emphasis on industrial development. Although the $5.5 billion plan allows only 15 percent for agricultural expenditures, an additional nine percent is for dams and irrigation. Long-term prospects for sales of agricultural equipment appear favorable, in the opinion of the mission members.

For Algeria, according to the mission director, the salient marketing features are: Monopoly purchases through State enter-

prises (National Corporations); appreciation of American quality and technology; emphasis on competitive bids, and a need for flexible credit terms.

Given the need to deal almost exclusively with State enterprises, the U.S. exporter of farm equipment should establish a relationship with local officials as soon as possible—some of Algeria's needs are extremely urgent, the mission points out. Once credentials have been established by offers to sell and mailings of catalogs (in French wherever possible) the exporter will have an opportunity to sell his equipment, normally under international competitive bids, to the appropriate State enterprise.

Libya: in transition

Libya, with the highest per capita income in all of Africa, is a country in transition, the U.S. businessmen observe. Its national needs are acute—in infrastructure, industry, and agribusiness. The outlook for sales of agriculture equipment is mixed. Except for the few large Government-directed projects, requirements for the near future are likely to be for small-scale farming.

NEAR ORANGE GROVE—*Landowner shows tillage equipment to mission members.*

For Libya, the salient marketing features are: A rich, oil-based economy assuring more than ample reserves for all needed purchases; dependency on imports, including foodstuffs and know-how; low productivity and a lack of technical personnel; central planning, including plans for land reclamation and large integrated agricultural projects; a land bank extending short- and long-term credit to individual farmers.

Morocco: priority, farming

The average businessman will find, the mission feels, that it is relatively easy to do business in Morocco, as he will deal primarily with the private sector, with limited Government intervention, in contrast to the situation in Algeria and Libya. However, the potential market for U.S. agricultural machinery, products and technology is probably smaller than in the other two countries visited. Morocco uses earnings from tourism, remittances of Moroccan labor abroad, and large infusions of foreign aid to pay for its vital imports.

Moroccan planners recognize the need for additional modernization. Development of a modern, in contrast to the traditional, agricultural sector has been a top priority of the Government. The current five-year plan emphasizes the construction of dams, irrigation, and assistance for large-scale farming.

Normal channels of trading are through agents, distributors, wholesalers. Even Government bureaus, which customarily procure on a bid basis, are required to purchase from local agents of foreign firms rather than import directly.

A significant factor for the U.S. exporter is the current AID program, including PL-480 and $13 million in development loans in 1972.

Businessmen members of the mission were: Thomas E. Dross, Dalton, Cooper & Gates Corp., New York; P. J. Harrah, Bloomfield Manufacturing Co., Inc., Bloomfield, Ind.; Laton M. Henderson, Moody International Corp., Aurora, Ill.; Edwin N. Hower, International Dravo Corp., Pittsburgh; William J. Jordan, Concrete Pipe Machinery Co., Sioux City, Iowa; Charles L. Metzger, Rotadrill Division, Schramm, Inc., West Chester, Pa.; and William H. Strong, Hyport International Corp., Los Angeles.

CLOSE OBSERVATION—*Mission member Charles Metzger examines irrigation system at orange grove near Kenitra.*

Economic trends in the three countries visited by the mission are detailed on pages 44-46 of this issue.

Illinois Mission Sees Business In West Africa

A Chicago architect, exploring markets in Nigeria and Ghana on a recent trade mission, took some first steps toward establishing a joint venture for his company—a relationship that he feels will greatly benefit these West African nations, as well as strengthen his company back home.

Another Chicago executive—also a participant in the 17-day Illinois mission that visited Accra, Kumasi, Lagos, and Kano—observes, "It's going to take a little time but I am very optimistic. My firm has the technical know-how that they need over there, and my follow-up visit before the end of the year should result in action on some concrete proposals that have been discussed."

The mission conferred with the Ministries of Trade and Industry in both countries as well as with other Ministries and Government officials, and met with chambers of commerce and individual businessmen. According to leader Lewis E. Langston, an assistant to Governor Richard B. Ogilvie, a variety of joint ventures were discussed in such areas as electronics, furniture, metal stamping, architectural engineering, urban planning, and warehousing.

The mission, drawn from the black business community in Illinois, was sponsored by the State's Department of Business and Economic Development and assisted by the U.S. Department of Commerce.

MEETING IN LAGOS—*Discussing financial assistance for joint ventures, Illinois mission talked with officials of Nigerian Industrial Development Bank. Left to right: Estella Gullatt, Design Services, Inc., and Walter H. Sanderson, Sanderson Industries, Inc., Chicago; Kennard Williams, Lombard, representing various electronics firms; Lewis Langston, Springfield, assistant to Governor. Mission member not shown: William T. Wallace, Environment Seven, Architects-Planners, Chicago.*

AMA Sets November Meetings—On Brazil, OFDI Regulations

Providing a forum for talking out problems with fellow international executives, the American Management Association on Nov. 18-19 will hold a briefing on "Brazil —Fulfillment of the Promise."

At the meeting, to be held at AMA headquarters, business and financial experts will analyze Brazil's economy, discussing the country's changing social, economic, and political conditions. Professor Lincoln Gordon, former U.S. Ambassador to Brazil and presently of the Johns Hopkins University School of Advanced International Studies in Washington, D.C., will be among the guest speakers.

Earlier, on Nov. 8-10, AMA will conduct an orientation seminar on foreign operations under the regulations of the Commerce Department's Office of Foreign Direct Investments. Recent developments and trends of the OFDI regulations, borrowing, corporate financial planning, and other topics will be discussed.

Write: American Management Association, 135 W. 50th St., New York, N.Y., 10020 (phone, 212-586-8100).

Puerto Rico Group Sells In Caribbean

'The more, the better' seems to describe Puerto Rico's experiences with trade missions. Reporting on its 14th, to Trinidad-Tobago and Barbados, the Commonwealth's Department of Commerce projects $1,040,000 in business in the next 12 months. Immediate sales during the Aug. 25-Sept. 1 visit reached almost $200,000.

No other single sponsoring unit has sent as many missions under the U.S. Department of Commerce's industry-organized Government-approved trade missions program. As for results, the 14th was the Commonwealth's best yet. It was led by Gerard Santerre, Puerto Rico's Assistant Secretary of Commerce.

Sales results were recorded by all mission members—the highest figures in packaging, footwear, clothing, foodstuffs, paints, steel, aluminum windows, plastic pipe.

Top Officials Hear U.S. Executives From Far East

Problems facing U.S. business in the Far East were discussed recently with top Administration officials by an eight-man team of American business executives from five Far Eastern countries.

The businessmen had come to Washington from Bangkok, Hong Kong, Seoul, Sydney, and Tokyo at the personal invitation of Secretary of Commerce Maurice H. Stans for a candid exchange of views with Washington officials.

During informal meetings, Oct. 18-21, the businessmen—all longtime residents in the Far East-Pacific region—raised a broad range of economic issues, including the problems faced by U.S. business abroad, the role of the U.S. Foreign Service, U.S. import policies, recent domestic measures undertaken by the U.S. Government, and activities of multinational companies. The business representatives particularly noted the need for the development and effective implementation of a long-range business-oriented economic policy in their region.

The program began and concluded with meetings with Secretary Stans. The group also presented views to Secretary of State William P. Rogers, Secretary of Labor James D. Hodgson, Council of Economic Advisers Chairman Paul W. McCracken, Under Secretary of the Treasury Charls E. Walker, and Under Secretary of the Interior William T. Pecora.

At the White House calls were made on Peter G. Peterson, Assistant to the President for International Economic Affairs, and Clark MacGregor, Counsel to the President for Congressional Relations. Congressional appointments included Speaker of the House Carl Albert and House Minority Leader Gerald R. Ford.

THE FULL TREATMENT—*Between-show exhibitors have full use of a Trade Center's facilities. These Paris visitors are at a geophysics seminar run by Techmation.*

The businessmen also met with Federal Reserve Board Chairman Arthur F. Burns, Chairman of the Joint Chiefs of Staff Admiral Thomas H. Moorer, Overseas Private Investment Corporation President Bradford Mills, and Eximbank Vice Chairman Walter C. Sauer.

The businessmen and their company affiliations are: From Hong Kong, A. Lewis Burridge, Sterling Drug International, Inc., who led the group and is currently the Chairman of the Asian-Pacific Council of American Chambers of Commerce; and Raymund A. Kathe, First National City Bank.

From Bangkok, John A. Reardon, Esso Standard (Thailand) Ltd. From Seoul, L. Hill Bonin, Jr., Korea Gulf Oil Co. From Sydney, Edwin T. Hamilton, International Franchises Pty., Ltd.

From Tokyo, James S. Adachi, Law Offices of Adachi & Hayashida, who is currently President of the American Chamber of Commerce in Japan; Donald M. Olson, Montgomery Ward & Co., Inc.; and Ernest H. Shrenzel, Motorola, Inc. Mrs. Anna Chennault, of The Flying Tiger Line, Inc., acted as Washington liaison for the visit and accompanied the group on its calls.

Between-Show Exhibits Give U.S. Firms Chance To Take Over Centers

The 100th between-shows exhibit held at the U.S. Trade Center in Paris yielded $500,000 in sales to Techmation S.A., a French firm which exhibited products of the nine American firms it represents (see other picture, Page 33 and item, Page 35). A seminar on geophysics and oceanography proved so successful that it was scheduled for repeats in nine European cities.

To take advantage of the facilities which the U.S. trade centers overseas offer to U.S. firms and their agents between regularly scheduled shows, companies may contact Trade Center Directors at:

Frankfurt: American Consulate General, APO New York, N. Y. 09757; *London*: American Embassy, Box 40, FPO New York, N. Y. 09510; *Milan*: American Consulate General, APO New York, N. Y. 09689 (M); *Paris*: American Embassy, APO New York, N. Y.; *Stockholm*: Box 630, Stockholm 1, Sweden; *Sydney*: American Consulate General, APO San Francisco, Cal. 96209; *Tokyo*: Tameike Tokyo Bldg., 1-14 Akasaka, 1-CHOME, MINATO-KU, Tokyo, Japan.

Canadian Economy Keeps On Expansionary Course

The Canadian economy is showing solid signs of healthy growth, reports the U.S. Embassy in Ottawa, although with some persistent price inflation and high unemployment.

At summer's end Canadians can look back to six successive quarters of (seasonally adjusted) growth of GNP—the last five quarters by increasing increments. The increase in GNP the first half of 1971 was almost double that in the first half of 1970. And—using the rough comparison of ten to one—if the increase in GNP during the year July 1970-June 1971 of C$ 7.2 billion was relatively about the same as that in the United States, Canada's lower price inflation yielded a growth record in real terms better than twice that of the United States.

CANADA LIFTS SIGHTS—*Capital spending plans have risen about 2 percent from intentions stated earlier in 1971. Above, uncured industrial tires are inspected at Goodyear's Toronto plant.*

A high rate of construction work and a rapid gain in consumer spending were the major elements in the Canadian advance. The buoyancy of retail sales kept inventories down so that re-stocking should be an element of strength in the period ahead.

One major economic indicator nevertheless marred the picture. Unemployment, on the seasonally-adjusted basis that must be used in observing an economy subject to Canada's climatic extremes, increased to 6.5 percent in August, from rates of 6.3 percent in July and 6.4 percent in June. The disappointing August figure apparently results from fewer 14 to 25-year olds leaving the labor force than normally has been the case.

In the meantime, with the seasonally-adjusted unemployment rates for persons 25 years and over at 4.4 percent—in itself not unsatisfactory in the minds of some observers—treatment in the media and public discussion of the economy centers on the unemployment figures, and tends to ignore a generally satisfactory economic performance.

Policy mix dilemma

The fundamental consideration underlying this paradox is Canada's rapid population growth, which temporarily is accentuating unemployment in a country chronically beset with regional and structural economic soft spots. Moreover the appreciation of the Canadian dollar, afloat since its unpegging in June 1970, has apparently begun to hurt the important pulp and paper industry, already suffering from reduced economic activity in the United States, its main market.

Thus, like the United States, Canada is in a situation—in some respects more extremely so—in which policies directed at the general level of economic activity seem to carry more threat of inflation than promise of growth, while policies directed at regional, structural, and institutional problems seem to the man in the street to offer benefits only in the remote future.

After Aug. 15, questions about Canada's economic outlook boiled down to judgments about the effects of President Nixon's New Economic Program (NEP). Coming at a time when signs of Canada's economic resurgence were increasingly solid, and the economy was picking up speed despite a 6-7 percent exchange rate appreciation, announcement of the NEP introduced major uncertainties for a business community still trying to assess where it would come out when the tax reform bill, introduced in June, became law.

With exports at about 25 percent of Canadian GNP, and two-thirds of them going to the United States, the U.S. import surcharge, the "Buy American" aspects of the Job Development Tax Credit, and the potential repercussions of the proposed Domestic International Sales Corporation are matters of major importance for Canada. This explains the quick and initially alarmist reaction, even though more than three-quarters of Canada's exports to the United States (based on 1970 figures) were exempt from the surcharge.

A major immediate problem was that the surcharge weighs heaviest on relatively labor-intensive manufacturing industries, some of which had been developed to take advantage of Kennedy Round tariff cuts. With unemployment figures already getting headlines, the NEP became a new threat to job security.

On balance, however, Canada has more to gain than any foreign country from the success of "the

efforts to set the U.S. economy on a sounder footing", as one Canadian bank has characterized the NEP. This is true in the first instance because the United States is so much Canada's biggest customer that Canadian prosperity inevitably is linked with American prosperity. Secondly, Canada should gain in third country markets from the realignment of foreign exchange rates—one of the objectives of the NEP. And currency rate changes that make imported finished goods more expensive—in particular imports from Japan—will tend to increase Canadian employment.

Nevertheless, the underlying uncertainty about the duration of the temporary surcharge is a major unsettling influence in the Canadian economy at the present time. This is the reason that many business and financial spokesmen hope that termination of the surcharge will soon be announced or, failing that, its rate will be moderated.

As of mid-August, the Canadian economy was definitely on an expansionary course. The prevailing atmosphere for business decisions since then has been one of uncertainty. Understandably, the government's main immediate concern is to maintain employment. For this reason, it has introduced an Employment Support Act to provide temporary support, while the surcharge is in effect, to help firms maintain their work forces in the face of lower sales to the U.S.

The main burden of the surcharge will fall on about C$ 1.5 billion of Canada's manufactured exports. These products, already hurt by the appreciation of the Canadian dollar are: fine papers; lumber; industrial machinery; electrical products; textiles; chemicals; and numerous consumer and industrial products. The United States might, the Canadians estimate, import several hundred million dollars less of manufactured Canadian goods if the surtax lasts for six to nine months. Canadian jobs potentially affected have been variously estimated from 40,000 to 90,000.

CONSTRUCTION KEYS CANADIAN ADVANCE—*A fast building pace has been a big factor behind the economic upturn. Here, another structure goes up in Toronto.*

Informed Canadians appreciate that Canada stands to benefit in 1972 and later from the beneficial economic effects the United States expects from the NEP. For the rest of 1971, however, Canadian exports may suffer, business investment may taper off and employment may deteriorate.

Encouraging note

Although economic prognoses are especially risky at this time, it is encouraging to note that the Department of Industry, Trade and Commerce reports that capital spending plans for 1971 by all sectors of the economy, as surveyed in May and June, involved total outlays of $19.6 billion, up two percent from intentions stated earlier in the year. Planned expenditures for both non-residential construction and machinery and equipment were up two percent. The largest upward revisions in business investment occurred in mining, finance, commercial services and trade.

In commenting on this report, the Minister of Industry, Trade and Commerce stated that the new U.S. economic program could have a significant bearing on investment plans in some sectors, but would not likely have an important effect on spending this year.

Meanwhile, increased Japanese competition is evident in British Columbia in sales of steel-making equipment, turbines and control gates for dams. Canada's total imports from Japan took a jump of 23 percent to almost $400 million—of which $78 million were automobiles—in the first seven months of 1971 over the same period in 1970.

In July the Quebec Assembly approved a bill for development of the James Bay power project, a project so big ($2 to $6 billion) that it should provide direct and indirect opportunities for American business, despite the province's announced intention to give preference to suppliers and construction firms from Quebec, provided they are competitive with bidders from elsewhere in Canada or from abroad.

Philippine Economy Is Stabilizing, But Prices Rise And Growth Dips

The Philippine economy continues to perform well in meeting the major objective of the February 1970 stabilization program, restoration of equilibrium in external payments. The U.S. Embassy in Manila points out, however, that this achievement has been at the cost of sharp price increases and a dip in the rate of economic growth.

Sharp export rise

Exports have increased sharply, and the Philippines now has a net trade surplus with its major trading partners, the United States and Japan. At the same time, credit and monetary restraints have continued to slow the demand for imported goods and services. These factors have contributed to a balance of payments surplus in both calendar 1970 and the first six months of 1971 and enabled the Government to take a number of measures to liberalize exchange and payments arrangements.

Compared to the annual rate of over 6 percent recorded in the late 1960's—with the help of large foreign capital inflows—fiscal 1970 and 1971 saw GNP growth dip to 5.2 percent and an estimated 4.7 percent, respectively. However, output is recovering from this period of adjustment, and a growth rate of 6.0 percent is projected for fiscal 1972.

The manufacturing sector, as expected, was adversely affected by the restrictive elements of the stabilization program but during the past half-year has shown definite signs of recovery. Output is increasing and major firms appear optimistic about future growth. Export-oriented industries and mining in particular continue to benefit from the devaluation of the peso in 1970, and increased productive capacity has brought expanded output in a number of industries.

Major local and foreign business enterprises with only a few exceptions report substantial profits in calendar 1970. According to a private survey, the country's top 200 firms realized an average 15.3 percent return on invested capital during the year. The outlook is for continuing profitable operations and expanded activity in the private sector, which accounts for some 90 percent of Philippine economic activity.

Unemployment continued at a relatively high rate, estimated at 6 to 8 percent of the labor force. There is also widespread underemployment. The number of new job opportunities, especially in agriculture, manufacturing and other prime employment sectors, has been falling short of the large number of young persons entering the work force each year.

Inflation warning

Concern about inflationary price increases and possible expansion of the money supply during the last half of 1971 was highlighted in a locally released International Monetary Fund report early in August. The report contained a warning that inflation could dissipate the benefits of devaluation in the external sector as well as cause reduced domestic saving, thus adversely affecting investment and growth.

Inflation became a major public issue by mid-1971 when the prices of basic commodities, including locally produced food staples such as rice and corn, had soared to new heights. The wholesale price index increased an average 2 percent per month for the 18 months ending June 30.

Government control of prices was interrupted June 30 for several weeks until new legislation revived the Price Control Council. Many firms are seeking to raise prices, but the Council has taken only limited action on these requests. Meanwhile, prices of many commodities important to the cost of living continue to rise.

One area of particular interest to U.S. firms, the marketing of refined petroleum products, was subjected to effective government price control despite justification presented by the firms for an increase based on higher crude oil and other costs. Following establishment of the new Oil Industry Commission in early August, a new series of hearings has begun on the proposed increases.

After a sharp contraction in 1970 as a result of stabilization measures, the money supply began to expand in the first part of 1971. The Central Bank moved on August 9 to curtail credit by imposing a new reserve requirement on commercial banks holding importers' deposits. The resulting tight money situation drove the prime interest rate above 14 percent and set the stage for reopening foreign exchange trading in late August.

The Philippine Government is completing a revision of the Four-Year Development Plan for the new period fiscal 1972-75. Growth targets are being raised from the earlier fiscal 1971-74 plan to an average 6.3 percent per year, accelerating from 6.0 percent in 1972 (compared to 5.5 percent in the earlier plan) to 6.7 percent in FY 1975. The development plan is being revised yearly in accordance with the concept of a four-year rolling plan.

Economic priorities

Priority is given in the plan to expansion and diversification of exports, utilization of labor-intensive methods of production, and greater industrial growth linked to the existing industrial base. Agriculture is to receive particular government support, with an initial effort to bring about self-sufficiency in food staples by the first year. Mining, manufacturing and construction

are also singled out for rapid expansion.

Public sector projects are concentrated in the fields of roads and other transport, power development (including rural electrification), irrigation and other water resources development, and public buildings. The plan envisages a marked increase in public investment over the fiscal 1970 and 1971 average.

U.S. share slips

The restrictive effect of the 1970 stabilization program on Philippine imports continues as a deterrent to expansion of U.S. sales. Competition with other foreign suppliers, notably Japanese, continues intense, and the U.S. share of the market slipped further from 29 percent in 1970 to 27 percent in the first five months of 1971. Japan also suffered a decline, however, with West Germany improving its position considerably.

There is a good prospect that U.S. exporters will benefit from the new U.S. economic measures recently announced, particularly if a long-term upward revaluation of the yen takes place relative to the peso and dollar. U.S. products, which historically have a strong base of acceptance in the Philippine market, will then be more competitive in price.

Continued expansion of mining and stepped-up government programs in road building and other transportation facilities and in electric power development should offer opportunities for heavy equipment sales. Agribusiness and other industrial development in the private sector should also provide new trade opportunities.

In the investment field, there are some encouraging signs that investment prospects in the Philippines are continuing to attract U.S. and other foreign investors. Several U.S. firms, including two major automobile manufacturers, have recently made known plans for substantial investment during the next few years. Profitability of operations in the Philippines and other historically favorable factors—such as ready availability of educated, English-speaking workers and staff, a sizable and growing domestic market, and the private enterprise milieu—tend to offset negative factors in the investment climate.

FILIPINOS PLAN NEW PROJECTS—*Now that the economy is stabilizing, the Government is giving more attention to development. Construction of public buildings, like the Ramon Magsaysay Center, above, is among areas getting priority.*

Investment study

There have also been indications of heightened Philippine Government interest in foreign investment problems. The Government has undertaken a major study of the "true benefits and costs of foreign investment for the nation's economic development". Factors affecting the investment climate are to be considered, as well as a projection of probable amounts of equity investments in future years in the current investment climate. The study is to be completed by February 1972.

Philippine Government officials, notably Finance Secretary Virata, have sought to explain that termination of the parity provisions of the Laurel-Langley agreement in 1974 should not have an adverse effect on the climate for U.S. investment. He and other government spokesmen have described practical measures—tailored if necessary to particular categories of investment and even to individual enterprises—which can enable U.S. firms to meet the legal requirements for foreign firms operating in the Philippines by 1974.

Responsible government officials are also giving attention to the problem of vested rights following termination of the agreement. No further legal steps have been taken to clarify the land ownership issue or the interpretation of current retail trade prohibitions. On the other hand, there have been published reports that the Government is studying possible financial arrangements to facilitate the shifts to minority foreign equity participation which will be required by Laurel-Langley termination. Arrangements of this kind administered by the Government could provide for an orderly transition to the post-parity regime. This would not only protect the American firms from financial loss, but for the Philippine economy would avoid a sudden outflow of foreign exchange and an undue strain on the local capital market.

North African Development Activity Expands Markets For U.S. Goods

Development activity is fueling economic expansion and generating bigger markets for U.S. products in Algeria, Libya and Morocco. The three adjacent North African nations have dissimilar economic and political characteristics and problems, but each is devoting substantial resources to economic development, according to reports recently received by the Department of Commerce from the U.S. Embassies in Algiers, Tripoli and Rabat.

Algeria's latest Plan

Algeria is well launched into the second year of its Four-Year Plan, which places heavy emphasis on industrial development. Private and public investment exceeded $1.2 billion in 1970 with the initiation of a series of new projects. Results of the Plan should begin to be felt in 1972 when a number of these projects become productive.

The Libyan economy, spurred by renewed development activity financed by the Government from oil income, is recovering from a year of stagnation and decline. The thrust of Libya's development effort is aimed at reducing the economy's dependence upon oil by building other potentially productive sectors. The main emphasis in development continues to be on agriculture, but industrialization and rapid expansion of the national oil company are also prominent features.

The expansion of the Moroccan economy which has occurred since the current Five-Year Plan began in 1968 appears to be continuing. The next Five-Year Plan, which begins in 1973, is again expected to give priority to investments in the agricultural sector and in particular to dams and irrigation.

Following are more details from each of the three reports.

Algeria: The decision announced by President Boumediene on Feb. 24 to partially nationalize French oil interests and to completely take over all pipe lines and gas resources has been the leading development of the year. Relations between France, Algeria's leading trade partner, and Algeria went into sharp decline. Tensions were relieved when one of the French producers, the Compagnie Francaise de Petrole, signed a new agreement with SONATRACH, the Algerian national oil and gas company.

SONATRACH, acting for the Algerian Government, has also successfully negotiated settlements with all U.S. oil companies which had their assets nationalized or sequestered in previous years. Among the U.S. firms affected are: ESSO, MOBIL, Newmont Mining, Sinclair/Atlantic, Richfield and Phillips. These settlements have gone a long way in opening new possibilities in relations between Algeria and the United States in the petroleum and gas industry.

The billion dollar SONATRACH-El Paso natural gas project dominates Algerian-American economic relations because of its enormous size. Under the project, output from a $300 million liquefied natural gas complex to be constructed by a U.S. firm at the port of Arzew would be transported to regasification facilities on the east coast of the United States. A decision by the U.S. Federal Power Commission is expected soon.

The key to Algeria's industrial development is the petroleum and gas sector. Of the three petrochemical complexes now under way, the nitrate and ammonia fertilizer plant at Arzew is the furthest advanced. The Annaba phosphates complex should be ready in early 1972. Bids are out on the plastics and ammonia complex plant at Skikda.

The El Hadjar iron and steel complex is the site of a whole series of projects. The hot rolling mill built by the Italian firm Innocenti is at present almost ready for start-up. The Soviet-built steel converters are, however, over a year behind schedule but should be ready by the end of 1971. New projects call for a cold rolling mill and seamless pipe and wire manufacturing units.

Work on a lead and zinc complex at El Abed is under way, as is the electrolytic zinc plant at Ghazaouet.

Progress is being made on other industrial projects. SONACOME (the State mechanical monopoly) is finally moving ahead rapidly on its tractor and diesel engine plants in Constantine and its bicycle and motorcycle plants in Guelma. SONELEC (State electrical monopoly) signed, in August, a contract with a group of West German firms to set up an electrical manufacturing complex at Tizi-Ouzou. Other projects on the way include a woolen goods complex at Tiaret, a paper and cardboard plant at El-Harrach and a plate-glass factory at Oran.

U.S. role expands

The Algerian Government is turning to the developed countries for help and know-how in putting together turnkey operations, basic feasibility and engineering studies, or undertaking the actual construction work itself. In this general area, American firms had in the past limited themselves largely to the "consultant" role.

More recently, however, American business moved into a new phase in its activities in Algeria with the signature of a number of contracts and continuing negotiations in many areas. Talks are under way between U.S. companies and State enterprises in the petro-

Algeria, Libya and Morocco were recently visited by a U.S. Trade Mission for Agricultural Development. The Mission's report begins on page 36 of this issue.

chemical, mechanical, electronic, building materials, mineral processing and chemical industries.

The Algerian Government is moving ahead on its intention to place all foreign trade under its direct control. It is applying this control in several ways: a whole series of state enterprises has been formed or will be created to monopolize imports; a major portion of imported goods requires import licenses; and so-called free list items now need a preliminary agreement from the Ministry of Commerce. The Government intends eventually to do away with the licensing system and to place the entire market under the control of the state monopolies.

In some instances American companies might find it to their advantage to explore local manufacture or assembly. In other cases, it is best to cut losses and give up the market entirely.

In cases where the specialized nature of the products sold cannot be produced in Algeria, American firms are finding themselves under considerable pressure to deal almost exclusively with various State Enterprises. Since these Government monopolies are here to stay, the sooner that the U.S. exporter establishes a new relationship with the monopoly, the better are his chances to protect or enlarge his market.

Libya: Buffeted in rapid succession by dramatic political change, abrupt suspension of development expenditure, reorganization of the government and expulsion of the commercially important Italian community, Libya's economy entered a pronounced slump in late 1969 from which it began to recover only a year later.

From a historic high in 1969, activity in the non-oil sectors of the Libyan economy declined sharply through most of 1970. The recovery which began in late 1970 has continued, and the level of activity for 1971, apart from the oil sector, is expected to nearly equal the previous high.

Despite long-term plans to reduce dependence upon the foreign-dominated oil sector, income from oil is the backbone of the Libyan economy and will continue to be for the indefinite future. Government income per barrel of oil has nearly doubled as the result of two rounds of difficult negotiations with the oil companies. Oil payments for 1971 should approach $2 billion, which is sufficient to finance all foreseeable government expenditure and leave a surplus in the order of $600 million.

A casualty of this success, however, has been that production has declined in the oil sector—first, because of government controls and, more recently, for economic reasons. Stagnation in this vital area acts as a brake on growth, despite the high level of government earnings.

With a slowdown in the oil sector and greater government involvement in the economy, sales opportunities increasingly are concentrated in the national development program. Libya's ambitious plans to build a new economy offer American firms the opportunity to sell technologically advanced services and equipment. But Libya's wealth is attracting keen trade competition and the need to capitalize upon the established reputation of American products is urgent.

U.S. sales declined

Total Libyan imports in 1970 declined by $122 million, or 18 percent compared with 1969. Hardest hit were imports of construction materials and equipment, oil field supplies and motor vehicles. It is these areas, however, which have been the core of U.S. exports to Libya. Consequently, imports from the United States declined by $50 million, or 40 percent, and the share of the Libyan market fell from 19 percent in 1969 to 14 percent for 1970.

Despite this sharp decline, the United States maintained its position as the second ranking supplier to Libya, after Italy, but the message seems clear—the composition of U.S. trade must change to meet the new requirements of the Libyan economy if we are to maintain and improve our market position.

NORTH AFRICAN LNG—*A pipeline for liquefied natural gas is constructed at Zelten, Libya. LNG also figures big in Algerian plans and market prospects.*

For 1971, Libya's imports are again increasing, but by how much is uncertain. Imports of consumer goods are rising and sales of construction material and equipment are recovering. But the expansion in equipment sales is being led by government purchases for development projects—rather than, as previously, by the oil sector. The best market prospects, therefore, are for sales of equipment and services related to Libya's development program.

American construction and agricultural equipment is well represented and appreciated in the Libyan market. The emphasis on agricultural expansion and the construction component common to virtually all development projects provide a firm base for sales expansion, especially of earthmoving and excavation equipment, power tools, and farm and irrigation equipment of all kinds.

The U.S. position as a leading supplier to the oil industry seems secure, and, while the prospects for

a rising volume of sales are not especially bright, purchases by the oil industry will continue to be an important element in Libya's imports.

Libya's plans for improving medical services provide another prime market area. Equipment for new institutions will be needed, and sales of medical supplies and pharmaceuticals are rising and should continue to do so.

Two opportunity areas

Other opportunities lie, broadly, in two areas: equipment designed to improve the quality and efficiency of labor in Libya's labor-short economy, and equipment for new industrial plants. The first category includes educational and laboratory equipment, as well as data processing equipment. The second, and perhaps most important, category is the most difficult in which to identify specific opportunities. However, the government's commitment to industrialization is evident from the $90 million allocated for industry in the current development budget. Suppliers of consumer goods manufacturing and minerals processing equipment, especially, will need to assess the possibilities as plans for new projects are announced.

Apart from opportunities for sales of capital goods, Libya presents a growing market for consulting services to plan and design projects and, in the case of industry, to train Libyan staff, recruit technicians and to provide management assistance.

Morocco: Following an abortive coup d'etat on July 10, King Hassan II appointed a transitional government in August to serve for 18 months. The new Government has a mandate to carry out reforms designed to increase government efficiency, promote economic development, and assure a more equitable distribution of wealth.

Moroccan agricultural production since 1967 has grown over three times the 2.1 percent annual rate projected in the Five-Year Plan. This has had a favorable impact on the whole economy and has enabled GDP to grow at a faster rate than the 4.3 percent average rate called for in the Plan. It seems likely that GDP will increase this year by between 4 and 5 percent and the annual average increase for the first four years of the Plan will be about 5 percent. This contrasts with an average increase of only 3 percent in 1960-67, which was below the 3.2 percent annual rate of population increase.

High investment rate

A high rate of both public and private investment since 1967 has contributed to the increased rate of economic growth. Gross fixed capital formation rose at an annual rate of about 10 percent between 1964 and 1970.

The United States is the second most important source of Moroccan imports. The readjustment in world exchange rates which began in August 1971 will probably result in increased sales of U.S. manufactured products, which have encountered strong competition in prices from European suppliers in the past.

The modernization of Moroccan agriculture will lead to continuing imports of agricultural machinery and implements to supplement domestic assembly plants. Some imported fertilizer is also necessary to complement domestic production. There should be a market for tractors and other agricultural machinery from U.S. firms, although most of this would probably be supplied by U.S. subsidiaries in Europe.

U.S. technology is held in high esteem in Morocco. Morocco is increasingly turning to the United States for aircraft, for example. Royal Air Maroc has already bought two Boeing B-727's. There is also a good demand for U.S. earthmoving and mining equipment. The modernization of Moroccan airfields should lead to requirements for additional meteorological and air traffic control equipment. There is a continuing demand for various kinds of pumps, particularly in connection with irrigation. The National Railways will be acquiring new locomotives and other rolling stock. There may also be possibilities for the sale of electric generating and transmission equipment.

Morocco's renewed emphasis on industrialization should create an improved market for U.S. industrial equipment. The food processing and chemical industries in particular will probably be expanded in the coming years. There is a good market for tinplate and kraft paper for Morocco's food processing and packaging plants. There should be a market for office machinery and possibly small computers.

Morocco seeks investment

Morocco is particularly interested in encouraging U.S. investors to come to Morocco. This interest has been renewed by the new transitional government named by King Hassan. Investments in agriculture as well as in industry and tourism are encouraged. The Government itself, or one of its agencies, will frequently participate with foreign investors. A wide variety of tax and other incentives have been provided for foreign investors.

As the current Five-Year Plan approaches its end, U.S. firms might do well to follow closely announcements of plans for the next Five-Year Plan which begins in 1973. The Government is already beginning to announce projects which will be included in the next Plan. The Government appears to have adhered fairly closely to the current Plan in carrying out its investment decisions. The Plan, therefore, is a good guide as to what major projects the Government intends to undertake and what major acquisitions will be necessary.

Uruguay Records Modest Growth Despite Setbacks

Uruguay's four-year trend of growth should continue in 1971, reports the U.S. Embassy in Montevideo, despite terrorism, lower than normal tourist earnings and decreasing foreign exchange reserves.

Agriculture is leading the way for the economy; livestock and pastures as well as cultivated land are in good condition, giving hope for another year of excellent harvests.

Continuing unrest in industry will probably mean a slowdown in the high levels of production registered during the first half of 1971. Primary motivation for these disturbances is a demand for higher wages to meet the rise in the cost of living, although political factors doubtless are involved. These interruptions are likely to continue through the general election campaign and probably into early 1972.

Building construction has picked up during the year, primarily in response to the government's wish to maintain a high rhythm of public-works projects.

In spite of a highly publicized program of planned public investment, capital spending in some areas has slackened during the last few months. The investment plan establishes, in general terms, amounts to be invested but does not provide priorities or timetables for specific programs. The availability of enough resources to finance the program remains uncertain.

In response to a call for bids to construct the Palmar dam and hydroelectric complex, only one consortium replied. Preliminary studies are being undertaken for an offshore floating oil terminal, with an onshore tank farm and 160-mile pipeline to the refinery in Montevideo. No results have yet been announced from the oil exploration off the Uruguayan coast; they are expected, however, sometime during the next six months.

The contract of AFE, the state railroad, for the rebuilding of diesel locomotives in the United States is stalled because of foreign exchange problems. Investments in nontraditional areas such as the fishing industry and large scale public investment in the meatpacking houses continue to be in the news, but with no concrete results yet. Due to the fluid political situation it is likely that the status of all such projects will remain uncertain until after the first of the year.

Prospects for the cost of living in Uruguay for the remainder of 1971 and early 1972 are that it will continue to increase at the present rate of approximately 20 percent per year.

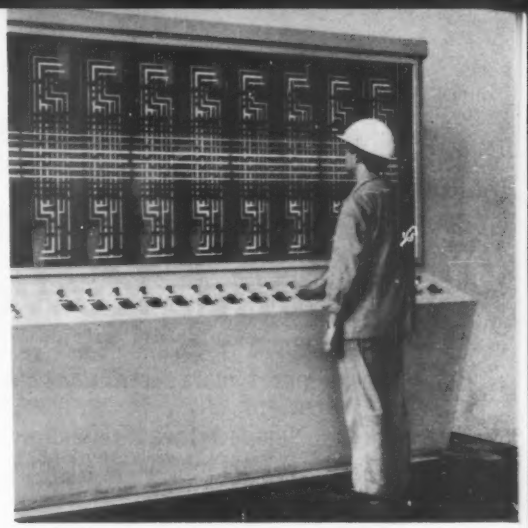
The multiple exchange-rate system which was instituted in May 1971, and stringent import controls including a quota system and higher tariff rates, should preclude high levels of importation or payments on invisible accounts over the next few months. Nevertheless, the country's foreign debt payment schedule may cause net exchange reserves to decline.

Bright spot

Exports provided a bright spot in the Uruguayan economy for the first half of 1971; both meat and wool were up over the same period a year ago. In July this trend began to slacken, with the two major exports, wool and meat, being the hardest hit.

Partial recovery from this slump is expected by October, but meat exports for the year should be somewhat below last year's. Prospects for 1972 are for a continued increase in the dollar value of exports, but what happens to the official exchange rate will provide the key to the situation.

During June, July and August all imports dropped off substantially, in response to the imposition of rigid restrictions, including a freeze on capital goods imports; as a result, total imports are expected to be down substantially for the year. It is hoped that the trade surplus for the year will reach $20 million.



MONTEVIDEO PLANT—*All refrigeration operations in the FRIGORIFICO meat packing facility are regulated from this panel. Uruguayan meat exports are picking up again after a mid-year slump.*

Uruguayan trading patterns remain substantially unchanged, with the greatest percentage of trade moving between Uruguay and the European Common Market. West Germany rates as the largest single trading partner with Brazil second, Italy third, and the United States fourth.

In Uruguayan imports through June, the United States maintained second position (US$12.8 million) behind Brazil ($15.1 million) and ahead of West Germany ($11.5). As a customer of Uruguay, however, the United States in first-half 1971 dropped to sixth place.

For the next several months Uruguay will remain a question mark for companies wishing to invest. The terrorist threat remains, while political uncertainty rises as national elections draw near. A new government will be elected in November 1971 to take office in March 1972.

The stringent controls on foreign exchange transactions are expected to continue at least through the first of next year. These controls have had a dampening effect on new or expanded investments and have complicated foreign-trade transactions.

World Trade Actions

Japan Lifts Import Quotas; Austria, Kuwait Also Act

Japan: The Government has removed import quota restrictions on 20 items (in terms of Brussels Tariff Nomenclature four-digit categories) and on parts of five other items, effective Oct. 1. As a result, the number of BTN items (exclusive of 11 state-traded items and 39 items controlled for security and health reasons) on Japan's Import Quota (IQ) list, which are recognized by the Japanese Government as being inconsistent with its obligations under the General Agreement on Tariff and Trade (GATT), has been reduced to 40. Further reductions in the IQ list are expected by March 31.

Simultaneous with the IQ reductions, import duties were increased on seven of the items, while the duty on one item was reduced.

The Japanese Government also announced the transferral of 27 out of 38 BTN items on the Automatic Import Quota (AIQ) list to the Automatic Approval (AA) system, under which commodities may be imported without prior Government review. Most of the remaining 11 items on the AIQ list will reportedly be removed by Dec. 31.

The 20 items completely removed from the IQ list and the five items partially removed (indicated by "ex"), together with the new tariffs on eight items, are as follows: (BTN 01.02) live animals of the bovine species (duty of 45,000 to 75,000 yen per head, except animals for breeding, free); (01.03) live swine (10 percent duty up to 500 kilograms, over 500 kilograms, duty of 10 percent or based on formula, whichever is greater, except animals for breeding, free); (ex 02.01) meat and offals of pigs, fresh, chilled or frozen (10 percent tariff or variable levy formula, whichever greater); and (07.06) manioc, arrowroot, salep, Jerusalem artichokes, sweet potatoes and other similar roots and tubers.

Also, (11.06) flour and meal of sago and of manioc, arrowroot, salep and other roots and tubers; (17.03) molasses; (17.04) sugar confectionery; (17.05) flavored or colored sugars, syrups and molasses; (18.06) chocolate confectionery and other food preparations containing cocoa and added sugar; (19.08) biscuits, cookies and crackers; (ex 20.02) mashed potatoes and potato flakes; (ex 21.07) canned sweet corn; (22.02) nectar; (22.08) ethyl alcohol and denatured spirits; (23.01) flours and meals of fish, residues of fish (free within tariff quota, 20 yen per kg. for above quota imports); (ex 27.01) heavy coking coal; and (27.02) lignite.

Also, (29.05) menthol (40 percent or 1.2 yen per gram tariff, whichever is greater); (33.01) peppermint oil and crude peppermint oil (duty reduced to 5 percent); (35.05) dextrins and dextrin glues, soluble or roasted starches (25 percent duty or 30 yen per kilogram, whichever is greater); (38.12) prepared dressings for starching (25 percent duty or 30 yen per kilogram, whichever is greater); (84.05) steam turbines; (ex 84.54) digital-analog and analog-digital converters; (85.13) telephone switchboards and exchanges; and (85.22) controllers for digital electronic computers.

Austria: In order to protect Austrian traders from adverse exchange rate fluctuations on their U.S. dollar transactions, the Government has directed the National Bank and the Kontrollbank to sell forward exchange contracts on favorable terms for transactions maturing in 12 months or more. The National Bank will also create facilities for the protection of short term dollar claims. In addition, for Austria's substantial trade with Eastern Europe, the Austrian Schilling, rather than the U.S. dollar, will henceforth be used as the unit of account.

Kuwait: The requirement for competitive bidding on consulting contracts has been relaxed. A Consulting Houses Selection Committee has been formed under the Planning Board to select consulting firms to carry out surveys of building construction, civil engineering, planning, industrial and administrative projects for the Government.

One of the following selection methods will be used: *First*, firms of similar ability may be invited to compete for fees. The Committee may select either the lowest fee or the best offer regardless of fee, whichever is more advantageous to the State. *Second*, firms of similar ability may be invited to compete in a contest for the design and estimated cost of a project. A special sub-committee will evaluate the designs and estimated costs and the Committee will select the best design and negotiate the fees. *Third*, a single firm may be chosen to carry out the work required for a project. The Committee will then negotiate with the firm for its fees and for any supervisory personnel if this is required. *Fourth*, only national consulting firms may be invited to compete for the fees or the design. *Fifth*, firms may be chosen to make studies, surveys, evaluation and auditing in return for a negotiated fee.

Foreign consulting firms doing business in Kuwait no longer require a Kuwaiti agent for government projects if the activities are restricted to consulting services only. If activities should expand to include management or project execution, a Kuwaiti agent must be employed. Foreign builders continue to require a Kuwaiti agent.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies, appoint agents, major construction and expansion projects, and U.S. visits by foreign buyers.

U.S. Promotions Overseas

FRANCE. Selected Telecommunications Equipment. The French telecommunications sector offers a growing market for many types of advanced U.S. equipment as the French Government and private industry strive to modernize their communications systems. French consumption is expanding at a rate of 50 percent annually, and U.S. manufacturers hold a vast technological lead over other countries in this field. Call Chuck Whitley, 202-967-4961. Paris Trade Center. Dec. 6-10.

GERMANY. Equipment for Vacuum & Cryogenic Research. American sales of vacuum and cryogenic equipment in Germany's market are largest for the more advanced and sophisticated lines. American industry has been a leader in the application of advanced high and ultra-high vacuum technology in research and in specialized cryogenic lines. Call George Kemp, 202-967-3088. Frankfurt Trade Center. Dec. 6-10.

JAPAN. Air & Water Pollution Control. Japan is suffering with the problems of pollution. Her great factory cities, Tokyo, Osaka-Kobe, Nagoya and Fukuoka, like their counterparts in the U.S. and Europe, are daily showered with tons of pollutants. Rivers are choked with industrial wastes. The Japanese Government has acted to put into force laws which will clean up Japan's air and water. Antipollution equipment produced in Japan is not being made in great enough quantity or variety to meet all demands, which are predicted reaching $450 million by 1975. A seminar will run concurrently with the show. Call Randy Miller, 202-967-3363. Off-site Tokyo Trade Center Exhibition. Dec. 6-11.

GERMANY. Sophisticated Materials for Electronics. German production of electronic equipment and components totaled more than $4.5 billion in 1970—and will top the $5 billion mark in 1971. Annual growth of 20-25 percent is forecast for 1972-73. Local German production of electronics, especially components, has been increasing, and this trend will be accelerated by two major factors: much greater use of electronics in consumer appliances, telecommunications, and automotive components; and fast rising needs for automation, traffic, and pollution controls. German electronics manufacturers continue to look to the United States for the best quality and most advanced technology in materials, and these are the most important factors in materials buying decisions. Call Don Schmadel, 202-967-4601. Frankfurt Trade Center. Jan. 17-21, 1972.

SCANDINAVIA. Metals Processing Equipment. The Scandinavian market for metals processing equipment is estimated at $450 million, of which imports account for 75 percent. U.S. suppliers provide $35 million of these imports, which are increasing substantially in all four Nordic countries. Sweden alone represents a $250 million market, to which U.S. firms supplied $20 million in equipment and $52 million in metals and minerals in 1969. Investment in the Swedish iron and steel industries is expected to reach $125 million annually between 1971 and 1975. Programs currently under way or planned call for increased outlays for advanced production equipment, process controls, test and measuring instruments, powder metals and related equipment, and special metals and super alloys. Call A. J. Beiring, 202-967-3713. Stockholm Trade Center. Jan. 24-29, 1972.

UNITED KINGDOM. Computer Graphics & Computer Aided Design. Market research indicates that graphic display equipment is of most interest to data processing managers in this, the fourth largest computer market in the world. The number of EDP users is increasing rapidly, and U.S. equipment is the dominant factor in the growing import market. Call Eugene F. Shaw, 202-967-3838. London Trade Center, Jan. 31-Feb. 4, 1972.

GERMANY. Nuclear Instrumentation and Equipment. Market research has identified a wide range of U.S. equipment having excellent sales potential in the Federal Republic of Germany. Instrumentation and equipment for high and low energy physics and for nuclear medicine applications, in-core instrumentation for reactors, and computerized instrumentation and measurement equipment are being sought by German buyers of nuclear equipment. By 1975, imports of U.S. nuclear-related equipment are expected to exceed $100 million yearly. Call Henry Weseloh, 202-967-2800. Frankfurt Trade Center. Feb. 21-24, 1972.

SCANDINAVIA. Hotel & Restaurant Equipment. In 1970 U.S. firms exported to the Nordic area institutional equipment and products valued at more than $30 million. Increased potential for sales of American goods in this area is being brought about by increased availability of capital; severe shortages of labor and its high cost, resulting in demand for labor-saving devices and systems; transformation from small family businesses to high volume accommodations and large-scale serving, made possible by industrial methods of food preparation and management; economies of standardization and mass purchasing by large chains; a trend toward more food consumption outside the home; and rising tourism. Call John R. Crown II, 202-967-4421. Stockholm Trade Center. Feb. 21-26, 1972.

ITALY. Data Communications Equipment. This offers one of the best opportunities for U.S. firms to increase sales in the Italian EDP market, which is forecast at $160 million by the end of 1972. U.S. firms currently dominate this market, which is growing at a rate near 20 percent per year. Market research has identified good sales opportunities for U.S. suppliers of terminals and display systems, data transmission systems, data entry systems and converters, modems, and other similar or related equipment. Call 202-967-3944 or write U.S. Department of Commerce, BIC-944, Washington, D.C. 20230. Milan Trade Center. Feb. 22-26, 1972.

MEXICO. Metalworking Equipment and Controls. Imports of automatic metalworking equipment are estimated to have increased from $6 million in 1967 to over $25 million in 1970. Rapid industrialization and consequent need for higher and better quality production will require an increasing rate of importation of this type of equipment, of which up to 60 percent is supplied by U.S. producers.

Mexican buyers of advanced metalworking equipment and controls will come to the exhibition. Also, a select group of agents and distributors interested in establishing long-term business relationships with American firms will attend. Call Joe McNulty, 202-967-3350. Mexico City Trade Center, Mar. 6-10, 1972.

JAPAN. Pulp, Paper Manufacturing Equipment, Instruments and Supplies. Supported by a rapidly increasing demand for pulp and paper, Japan has emerged as one of the world's foremost producers. It now ranks second after the United States in the production of paper and paperboard, producing 12.9 million tons in 1970, an increase of almost 15 percent since 1969. Similarly, Japan has increased its lead in pulp production, producing 8.8 million tons in 1970, to become third largest in the world. To

keep pace with the increased demand, sizeable investments in Japanese pulp and paper production facilities are being planned, providing a ready market for U.S. equipment. Call William E. Dawson, 202-967-5286. Tokyo Trade Center, Mar. 13-18, 1972.

ITALY. Analytical Laboratory Apparatus Exhibition. The Italian market for analytical laboratory apparatus continues to expand at 20 percent a year. The United States is the principal supplier of advanced analytical laboratory equipment to the Italian market. The show will include analytical laboratory apparatus for the chemical, biochemical, petrochemical, pharmaceutical, medical, food processing, metal mechanics, plastics and man-made fibers and pollution control industries, as well as for colleges of chemistry, biology, pharmacology, medicine and surgery, chemical engineering and agriculture, and public laboratories and hospitals, private hospitals and research centers. Call Sam Spauling, 202-967-3968. Milan Trade Center, Mar. 14-18, 1972.

FRANCE. Minicomputers and Related Peripherals. The use of minicomputers in France is growing rapidly. French business concerns are aware of their need for automatic data processing and are becoming ready customers for small computers. The U.S. Trade Center show offers an opportunity to show small-scale computers and peripherals to one of the fastest growing markets for computer equipment. Sales of EDP equipment are growing at a rate of 20 percent annually and are expected to reach $900 million by 1974. Contact Gus Duda, 202-967-2434. Paris Trade Center, Mar. 20-24, 1972.

GERMANY. Pollution Control Equipment and Instrumentation. U.S. manufacturers can enlarge their share of the $1.3 billion German pollution control market by taking advantage of the great demand for American expertise by exhibiting air and water pollution sampling, measuring, analyzing, and control instrumentation, reverse osmosis systems, and "clean room" equipment. While Germany makes the most of its own pollution treatment equipment for its well-developed pollution control network, both German industry and government enforcement agencies continue to look to the United States for the best quality and most advanced technology, these being the most important factors in their purchasing decisions. Call Lee Swift, Jr. 202-967-4461. Frankfurt Trade Center, Mar. 20-24, 1972.

SCANDINAVIA. Building Products and Construction Equipment. Scandinavian markets for building products and construction equipment have been booming for the past several years, and continued growth in construction activity is forecast through 1975. U.S. exports of building products to the four Nordic countries expanded by 89 percent in the last three years to a total of over $24.8 million. U.S. exports of construction equipment expanded by 30 percent during the same three years to over $31.6 million. A survey of leading builders, contractors, architects, and sub-contractors, as well as distributors of building products and construction equipment, reveals very high interest in seeing the latest and best in U.S. equipment and products. Call C. E. Walls on 202-967-4256. U.S. Trade Center for Scandinavia, Mar. 20-25, 1972.

UNITED KINGDOM. High Fidelity and Stereophonic Equipment. With reductions in the personal income tax and consumer goods taxes as well as easing of terms of the hire purchase (installment buying) regulations, the British personal audio equipment buyer finds conditions favorable to acquire the high quality U.S. equipment he admires. Exhibitors will benefit from a "Dealer Day" promotion and late closing to accommodate consumer visitors. Invitations will go to a select audience of distributors and retailers; a contest will galvanize customer attendance interest. Call Lee W. Swift Jr., 202-967-4461. London Trade Center, Mar. 20-24, 1972.

FRANCE. Materials Test and Quality Control Equipment. The French market for materials test and quality control equipment offers a substantial opportunity to U.S. suppliers since it is estimated that imports are equivalent to about 45 percent of French production. Estimates of imports were $22.5 million in 1970 and are expected to increase by $2 million annually through 1973. The Exhibition will feature electrical and electronic test and analyzing equipment as well as sophisticated mechanical equipment.

Call Charles M. Whitley at 202-967-4961. Paris Trade Center. Apr. 17-21, 1972.

UNITED KINGDOM. Transducer Instrumentation Exhibition. Growth in electronic monitoring and control has focussed British interest in latest U.S. developments in the transducer instrumentation field. A special survey has found prospects for a variety of American instrumentation equipment with applications in advanced industrial and research fields. For information call Henry Weseloh, 202-967-2800. London Trade Center, April 17-21, 1972.

YUGOSLAVIA AND EASTERN EUROPE. Air Conditioning, Commercial Refrigeration, Food Processing and Packaging Equipment. Eastern Europe and Yugoslav enterprises are demonstrating an increasing awareness of the need for modern equipment that will help them compete in tourism and export markets. Awareness has now reached the demand stage for these kinds of equipment, according to surveys conducted recently by the U.S. Department of Commerce. U.S. Government Trade Missions and other special trade development programs recently undertaken by Commerce indicate that these countries will be making increasing purchases of the items to be displayed. Exhibiting manufacturers wishing to get in on the ground floor will be given special advantages. For further information about Food Processing and Packaging call Thomas N. Nisbet, 202-967-4161. Information about the Air Conditioning and Commercial Refrigeration opportunities is available from Fred E. Crosley, Jr., 202-967-4162. Zagreb International Spring Fair, Apr. 17-23, 1972.

MEXICO. Industrial Process and Analytical Instrumentation. The Mexican market for this type instrumentation will total about $40 million annually by the end of 1971. Imports are expected to account for $35 million of the country's needs with the U.S. share of the market estimated at $24 million. The Mexican Government encourages manufactured goods exports, and is urging industrialists to modernize production and quality control testing facilities; this has increased the demand for advanced instruments. This exhibition offers U.S. suppliers an excellent opportunity to introduce or expand sales in a growing market where new U.S. Trade Center facilities have recently been inaugurated. Call Jim Blow, 202-967-4565. Mexico City Trade Center. April 24-28, 1972.

ARGENTINA. Quality Control and Reliability Equipment Exhibition/Seminar. This is the inaugural event of the first U.S. Regional Trade Development Center to be established in South America. As Latin American industry continues to expand, increased emphasis is being placed on automation and quality control. The Argentine Government is fostering quality control and provides incentives for firms to purchase such equipment. The shortage of skilled labor assures a bright sales potential in the semi and fully automated equipment field. U.S. exports of quality control equipment to Argentina topped $4 million in 1970. Imports of sophisticated control, measuring, and testing equipment will grow considerably as limited local production is unable to supply the expanding industrial complex with equipment used in dimensional, non-destructive environment and optical testing. A seminar featuring the presentation of papers reflecting the latest in quality control technology is an added attraction to this exhibition. Call Franc Manzolillo, 202-967-3752. Buenos Aires Trade Center. May 15-19, 1972.

Sales opportunities in two U.S. commercial exhibitions, trade fairs and solo exhibitions and 22 shows at the nine U.S. Trade Centers are being offered to present and potential U.S. exporters between now and Oct. 23, 1972.

Each Trade Center exhibition is limited to one particular line of products and centers are located in Bangkok, London, Milan, Mexico City, Frankfurt, Stockholm, Sydney, Tokyo and Paris. For further information on the Trade Center shows described or for more facts on U.S. exhibitions, **write:** ***Commercial Exhibits Program, BIC-932, U.S. Department of Commerce, Washington, D.C. 20230.***

Trade missions are groups of U.S. businessmen organized to travel abroad promoting the export of U.S. goods and services made by their particular industry. **Write:** ***Trade Missions Div., BIC-926, U.S. Department of Commerce, Washington, D.C. 20230.***

UNITED KINGDOM. Materials Management Equipment. British buyers are seeking new and more sophisticated equipment and systems to fill their materials handling needs. Rapidly rising labor costs, coupled with tax incentives for capital investments, are encouraging British buyers to look to the United States for many types of equipment. This exhibition will be held in conjunction with the International Mechanical Handling Exhibition (IMHEX). Call Don Schmadel, 202-967-4601. London Trade Center, May 15-19, 1972.

MEXICO. Advanced Business Equipment. American manufacturers are urged to bring and display their latest equipment to Mexico City, where they will find a ready market and benefit from concentrated sales exposure before a wide but select audience of key buyers. Mexican imports of business equipment are estimated as $41 million for the year 1971, and U.S. firms supply an estimated 50 percent of this total. An intensive preshow market promotion campaign will be conducted by the new U.S. Trade Center to draw the maximum quality audience in this market, which is growing at 10 percent a year. Call Jim Blow, 202-967-4311. Mexico City Trade Center. June 5-9, 1972.

ARGENTINA. The First International Exhibition for Construction, Industry and Business/Seminar. This first full-scale Commercial U.S. Government/Industry Exhibition in the River Plate area will be the showcase for state-of-the-art developments in U.S. Instrumentation, Business Equipment, Construction, Machine Tools, and Printing and Graphic Arts. Top engineering and management executives from Argentine industry, government and military will be the target audience for this solo exhibition which will be enhanced by a special seminar featuring the presentation of papers reflecting the latest in technology and ideas in the field of U.S. instrumentation, business equipment, machine tools, construction, and printing and graphic arts. Call Franc Manzolillo, 202-967-3752. U.S. Solo Exhibition, CIBEX-USA 1972, Buenos Aires Municipal Center. Oct. 23-28, 1972.

Space Fully Booked

The following exhibitions and trade missions in which all exhibit space has been reserved are still open for visits by interested industry representatives. U.S. firms with sales representatives in these market areas may wish to ask them to investigate the shows.

Electro-Optics and Laser Equipment, Frankfurt Trade Center, Nov. 8-12; Printing & Graphic Arts Equipment, Business Equipment & Computers, Machine Tools, Construction Machinery, U.S. Solo Exhibition, Sao Paulo, Nov. 16-23; Selected Instruments for Physical & Chemical Measurement, Stockholm Trade Center, Nov. 22-27; Packaging Machinery, Mexico City Trade Center, Feb. 14-18, 1972; EDP Equipment, U.S. Commercial Exhibition, SYSTEMS 71, Munich, Nov. 30-Dec. 3; Environment Testing Equipment, London Trade Center, Dec. 6-10.

Many Countries Offer Investment Assistance Through Offices In U.S.

American companies contemplating overseas investment and licensing may find helpful the U.S. offices of foreign nations listed below. They provide a wide range of services to facilitate investment in their countries.

Current information on the economy, sources of finance, taxes, investment legislation and investment incentives is available from most of the offices. In addition, some can identify potential local participants and assist businessmen planning visits to their countries by making referrals to appropriate government and industry officials.

Also included in the list are two multinational organizations and the Overseas Private Investment Corporation (OPIC) which can provide finance, legal and technical assistance and, in the case of OPIC, investment insurance for certain ventures. Companies with well-developed potential investment projects may wish to discuss them with these organizations. The ADELA Development Corporation's interests are limited to the Latin American area; the International Finance Corporation's, to member countries; and OPIC's, to less developed countries.

This compilation includes all of the foreign government and other offices that have specifically asked to be placed on the list and is not an indication of the degree of interest in encouraging U.S. investment on the part of individual countries. For investment information on countries not represented on this list, it is suggested that inquiries be directed to the country's embassy in Washington. Embassies and consular offices frequently are in a position to supply advice and guidance.

Commerce does not assume responsibility for the accuracy or completeness of this list and would appreciate information on any inaccuracies. Such information as well as details on establishment of new offices should be directed to the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C., 20230.

ARGENTINA—Embassy of the Argentine Republic, 1600 New Hampshire Ave., NW., Washington, D.C., 20009 (202-332-7100).

AUSTRALIA — Australian Embassy, Commercial Minister, 1601 Massachusetts Ave., NW., Washington, D.C., 20036 (202-797-3000).

Australian Senior Trade Commissioner, Australian Consulate General, 636 Fifth Ave., New York, N. Y., 10020 (212-245-4000).

Australian Trade Commissioner, Australian Consulate General, 3550 Wilshire Boulevard, 17th Fl., Los Angeles, Calif., 90005 (213-380-4611).

Australian Trade Commissioner, Australian Consulate General, 1 Post St., Crocker Plaza, 8th Fl., San Francisco, Calif., 94104 (415-362-6160).

New South Wales Government Center, 680 Fifth Ave., New York, N. Y., 10019 (212-582-0336).

Sydney Morrell & Co. (For Victoria), 152 East 78th St., New York, N. Y., 10021 (212-249-7255).

AUSTRIA—Embassy of Austria, Commercial Attache, 2343 Massachusetts Ave., NW., Washington, D.C., 20008 (202-483-4474).

Austrian Trade Delegate, 845 Third Ave., New York, N. Y., 10022 (212-421-5250.

Austrian Trade Delegate, 332 South Michigan Ave., Chicago, Ill., 60611 (312-427-9629).

Austrian Trade Delegate, 3440 Wilshire Blvd., Los Angeles, Calif., 90005 (213-380-7990).

BARBADOS—The Barbados Industrial Development Corporation, 801 Second Ave., 2nd Fl., New York, N. Y., 10017 (212-686-5943).

BELGIUM—Belgian Consulate General, Industrial Section, 50 Rockefeller Plaza, New York, N. Y., 10020 (212-JU 6-5110).

BRAZIL—Embassy of Brazil, Commercial Attache, 3007 Whitehaven St., NW., Washington, D.C., 20008 (202-265-9880).

Brazilian Government Trade Bureau, 551 Fifth Ave., New York, N. Y., 10017 (212-682-1055).

Brazilian Consulate General, 630 Fifth Ave., New York, N. Y., 10020 (212-757-3080).

Brazilian Consulate General, 20 N. Wacker Drive, Chicago, Ill., 60606 (312-372-2176).

Brazilian Consulate General, 1306 International Trade Mart, New Orleans, La., 70130 (504-525-9874).

Brazilian Consulate General, 5900 Wilshire Blvd., Los Angeles, Calif., 90036 (213-937-5166).

Brazilian Consulate, 3400 Montrose Blvd., Houston, Tex., 77006 (713-526-3941).

Brazilian Consulate, 100 N. Biscayne Blvd., Miami, Fla., 33132 (305-377-1734).

CANADA — Canadian Embassy, Commercial Counsellor, 1746 Massachusetts Ave., NW., Washington, D.C., 20036 (202-332-1011).

Canadian Consulate General, Deputy Consul General (Commercial), 680 Fifth Ave., New York, N. Y., 10019 (212-586-2400).

Canadian Consulate General, Consul & Senior Trade Commissioner, 500 Boylston St., Boston, Mass., 02116 (617-262-3760).

Canadian Consulate, Consul & Trade Commissioner, 1400 Main Pl., 396 Main St., Buffalo, N. Y., 14201 (716-852-1247).

Canadian Consulate General, Consul & Senior Trade Commissioner, 310 South Michigan Ave., Suite 2000, Chicago, Ill., 60604 (312-427-1031).

Canadian Consulate General, Consul & Senior Trade Commissioner, Illuminating Bldg., 55 Public Square, Cleveland, Ohio, 44113 (216-861-1660).

Canadian Consulate, Consul & Trade Commissioner, 2100 Adolphus Tower, 1412 Main St., Dallas, Tex., 75202 (214-742-8031).

Canadian Consulate, Consul & Trade Commissioner, 1920 First Federal Bldg., 1001 Woodward Ave., Detroit, Mich., 48226 (313-965-2811).

Canadian Consulate General, Consul & Trade Commissioner, 510 West Sixth St., Los Angeles, Calif., 90014 (213-627-9511).

Canadian Consulate, Consul & Trade Commissioner, 15 South Fifth St., Minneapolis, Minn., 55402 (612-336-4641).

Canadian Consulate General, Consul & Trade Commissioner, 2110 International Trade Mart, New Orleans, La., 70130 (504-JA 5-2136).

Canadian Consulate, Consul & Trade Commissioner, 3 Parkway Bldg., Suite 1310, Philadelphia, Pa., 19102 (215-561-1750).

Canadian Consulate General, Consul & Trade Commissioner, Commercial Division, One Maritime Plaza, Golden Gateway Center, San Francisco, Calif., 94111 (415-981-2670).

Canadian Consulate General, Consul General & Trade Commissioner, 412 Plaza 600, Sixth & Stewart, Seattle, Wash., 98101 (206- MU 2-3515).

Quebec Government House, Office of the Agent General, 17 West 50th St., New York, N. Y., 10020 (212-581-0770).

Quebec Government House, 111 Jackson Blvd. West, Chicago, Ill., 60604 (312-427-7194).

Quebec Government House, Park Square Bldg., Suite 409, 31 St. James Ave., Boston, Mass., 02116 (617-426-2660).

Quebec Government House, 1714 Adolphus Tower Bldg., 1412 Main St., Dallas, Tex., 75202 (214-742-6095).

Quebec Government House, 510 West Sixth St., Suite 1202, Los Angeles, Calif., 90014 (213-680-9156).

Government of Ontario, Senior Trade & Industry Counsellor, 11 East Adams St., Suite 705, Chicago, Ill., 60603 (312-922-2170).

Government of Ontario, Senior Trade & Industry Counsellor, 680 Fifth Ave., Suite 1302, New York, N. Y., 10019 (212-247-2744).

Government of Ontario, Senior Trade & Industry Counsellor, 606 South Olive St., Suite 1001, Los Angeles, Calif., 90014 (213-627-3531).

Government of Ontario, Senior Trade & Industry Counsellor, 607 Boylston St., Suite 412, Boston, Mass., 02116 (617-261-8859).

Government of Ontario, Senior Trade & Industry Counsellor, 230 Peachtree St., NW., Suite 1800, Atlanta, Ga., 30303 (404-577-1883).

Government of Ontario, Trade & Industry Counsellor, Fidelity Bldg., Room 923, 1940 East Sixth St., Cleveland, Ohio, 44114 (216-861-7690).

Government of Ontario, Senior Trade & Industry Counsellor, Chamber of Commerce Bldg., Room 1256, 15 South 5th St., Minneapolis, Minn., 55402 (612-339-1800).

Government of the Province of Alberta, Suite 703, 510 West Sixth St., Los Angeles, Calif., 90014 (213-624-6371).

British Columbia House, 559 Market St., San Francisco, Calif., 94105 (415-981-4780).

CEYLON—Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C., 20008 (202-HU 3-4025).

CHILE—Corporacion de Fomento de la Produccion (CORFO), 80 Pine St., New York, N. Y., 10005 (212-344-9800).

CHINA (Taiwan)—Chinese Investment & Trade Office, 515 Madison Ave., New York, N. Y., 10022 (212-752-2340).

COLOMBIA—Colombia Center, 140 East 57th St., New York, N. Y., 10022 (212-421-8270).

CONGO (Kinshasa)—Embassy of the Democratic Republic of the Congo (Kinshasa), 1800 New Hampshire Ave., NW., Washington, D.C., 20009 (202-234-7690).

COSTA RICA—Office of Economic Development, Embassy of Costa Rica, 2112 S St., NW., Washington, D.C., 20008 (202-234-2945).

DOMINICAN REPUBLIC — Dominican Republic Consulate General, 30 Rockefeller Plaza, New York, N. Y. 10022 (212-CO 5-0630).

ECUADOR—Embassy of Ecuador, 2535 15th St., NW., Washington, D.C., 20009 (202-234-7200).

EL SALVADOR—Embassy of El Salvador, Minister for Economic, Financial and Commercial Affairs, 2308 California St., NW., Washington, D.C., 20008 (202-265-3480).

FINLAND—Embassy of Finland, Commercial/Economic Section, 1900 24th St., NW., Washington, D.C., 20008 (202-462-0556).

Consulate General of Finland, Finland House, 540 Madison Ave., New York, N. Y., 10022 (212-832-6550).

Consulate General of Finland, 120 Montgomery St., San Francisco, Calif., 94104 (415-981-4656).

Consulate & Commercial Office of Finland, 3600 Wilshire Blvd., Suite 1610, Los Angeles, Calif., 90005 (213-385-1779).

Vice Consulate & Commercial Office of Finland, Box 1484 (111 Church St.), Evanston, Ill., 60204 (312-491-0551).

FRANCE—French Industrial Development Agency, Rockefeller Center, 610 Fifth Ave., New York, N. Y., 10020 (212-PL 7-9340).

GERMANY—Manager, Market Development, German-American Chamber of Commerce, 666 Fifth Ave., New York, N. Y., 10019 (212-582-7788).

GHANA—Consulate General of Ghana, Ghana Trade & Investment Office, 150 East 58th St., New York, N. Y., 10022 (212-832-1300).

GREECE—Hellenic Industrial Development Bank, 1290 Ave. of the Americas, New York, N. Y., 10019 (212-757-3523).

GUATEMALA—Embassy of Guatemala, 2220 R St., NW., Washington, D.C., 20008 (202-332-2865).

HAITI—Embassy of Haiti, Commercial Attache, 4400 17th St., NW., Washington, D.C., 20011 (202-723-7001).

HONG KONG—Hong Kong Trade Development Council, 548 Fifth Ave., New York, N. Y., 10036 (212-582-6610).

Hong Kong Trade Development Council, 606 South Hill St., Suite 401/402, Los Angeles, Calif., 90014 (213-622-3194).

Hong Kong Trade Development Council, 333 N. Michigan Ave., Suite 1511, Chicago, Ill., 60601 (312-726-4515).

ICELAND—Embassy of Iceland, 2022 Connecticut Ave. NW., Washington, D.C., 20008 (202-265-6653).

INDIA—Indian Investment Centre, 708 Third Ave., New York, N. Y., 10017 (212-TN 7-3390).

INDONESIA — Indonesian Consulate General, Five East 68th St., New York, N. Y., 10021 (212-879-0600).

Embassy of the Republic of Indonesia, Economic Section, 2020 Massachusetts Ave. NW., Washington, D.C., 20036 (202-293-1745).

IRAN—Iranian Economic Mission, 5530 Wisconsin Ave., Washington, D.C., 20015 (301-654-7930).

IRELAND—Industrial Development Authority Ireland, 410 Park Ave., New York, N. Y., 10022 (212-371-8850).

Industrial Development Authority Ireland, 1 East Wacker Dr., Chicago, Ill., 60601 (312-644-7474).

Industrial Development Authority Ireland, 44 Montgomery St., San Francisco, Calif., 94104 (415-434-4758).

ISRAEL—Government of Israel Investment & Export Authority, 850 Third Ave., Suite 604, New York, N. Y., 10022 (212-PL 2-5600, ext. 268).

Government of Israel Investment & Export Authority, 659 South Highland Ave., Los Angeles, Calif., 90036 (213-938-3691).

Government of Israel Investment & Export Authority, 111 East Wacker Dr., Suite 1308, Chicago, Ill., 60601 (312-644-4140).

Government of Israel Investment & Export Authority, 805 Peachtree St., NE., Atlanta, Ga., 30308 (404-875-7561).

ITALY—Embassy of Italy, Commercial Office, 2600 Virginia Ave. NW., Suite 200, Washington, D.C., 20037 (202-337-3700).

Italian Consulate General, Commercial Office, 600 Madison Ave., New York, N. Y., 10022 (212-421-4895).

Italian Consulate General, Commercial Office, 785 Market St., Suite 604, San Francisco, Calif., 94102 (415-YU 2-3551).

Italian Trade Commissioner, 627 Statler Office Bldg., Boston, Mass., 02116 (617-426-3214).

Italian Trade Commissioner, 625 North Michigan Ave., Suite 411, Chicago, Ill., 60611 (312-787-3772).

Italian Trade Commissioner, 212 World Trade Bldg., Houston, Tex., 77002 (713-CA 2-2229).

Italian Trade Commissioner, 500 Griswold St., Suite 2961, Detroit, Mich., 48226 (313-964-3970).

Italian Trade Commissioner, 1900 Avenue of the Stars, Gateway West Bldg., Suite 1870, Century City, Los Angeles, Calif., 90067 (213-879-0950).

Italian Trade Commissioner, International Trade Mart, Suite 2414, New Orleans, La., 70112 (504-JA 5-9366).

Italian Trade Commissioner, 2 Penn Center Plaza, Suite 1401, Philadelphia, Pa., 19102 (215-LO 3-0641).

IVORY COAST—Embassy of the Republic of Ivory Coast, 2424 Massachusetts Ave. NW., Washington, D.C., 20008 (202-483-2400).

Ivory Coast Development Office, Economic Counselor, 521 Fifth Ave., New York, N. Y., 10017 (212-869-1700).

Consulate of the Ivory Coast, 9000 Sunset Blvd., Suite 1402, Los Angeles, Calif., 90069 (213-272-5158).

JAMAICA—Jamaica Industrial Development Corp., 200 Park Ave., New York, N. Y., 10017 (212-OX 7-1188).

JAPAN—Japan Trade Center, 393 Fifth Ave., New York, N. Y., 10016 (212-532-7191).

Japan Trade Center, 232 North Michigan Ave., Chicago, Ill., 60601 (312-726-4390).

Japan Trade Center, 1737 Post St., San Francisco, Calif., 94115 (415-922-0234).

Japan Trade Center, 727 W. Seventh St., Los Angeles, Calif., 90017 (213-625-0731).

Japan Trade Center, Melrose Bldg., 1127 Walker St., Houston, Tex., 70002 (713-227-8318).

Japan Trade Center, 2 Canal St., New Orleans, La., 70130 (504-525-8266)

KENYA—Embassy of Kenya, 2249 R St., NW., Washington, D.C., 20008 (202-234-4350).

KOREA—Korea Trade Promotion Center (KOTRA), Suite 4601, Empire State Bldg., 350 Fifth Ave., New York, N. Y., 10001 (212-594-9464).

Korea Trade Center, Occidental Center, 1149 South Hill St., Los Angeles, Calif. 90015 (213-748-5331).

Korea Trade Center, 111 E. Wacker Dr., Suite 519, Chicago, Ill., 60601 (312-644-4324).

Korea Trade Center, Room 250-C, World Trade Center, Ferry Bldg., San Francisco, Calif., 94111 (415-391-2637).

Korea Trade Center, 1142 One Main Place Bldg., Dallas, Tex., 75250 (214-748-9341).

LESOTHO—Embassy of the Kingdom of Lesotho, 1601 Connecticut Ave., NW., Suite 300, Washington, D.C., 20009 (202-462-4190).

LIBERIA—Embassy of Liberia, 5201 16th St., NW., Washington, D.C. 20011 (202-723-0437).

B. M. Lawrence & Co., 351 California St., San Francisco, Calif., 94104 (415-981-3650).

LUXEMBOURG — Luxembourg Consulate General, 200 E. 42nd St., New York, N. Y., 10017 (212-687-3166).

MALAYSIA — Embassy of Malaysia Trade Office, Attn: Trade Attache (Counselor), 845 Third Ave., 16th floor, New York, N. Y., 10022 (212-355-5028).

MALI—Embassy of Mali, 2130 R St., NW., Washington, D.C., 20008 (202-332-2249).

MARTINIQUE, GUADELOUPE & FRENCH GUIANA—French Commercial Counselor in Washington, Embassy of France, 1100 Connecticut Ave., NW., Washington, D.C. 20036 (202-223-6710).

MOROCCO—Embassy of Morocco, Attn: Commercial Counselor, Economic Section, 1601 21st St., NW., Washington, D.C., 20009 (202-462-7979).

Office of Commercialisation et d'exportation, 597 Fifth Ave., New York, N. Y., 10020 (212-758-2625).

NETHERLANDS — Industrial Commissioner for The Netherlands in the U.S., 1 Rockefeller Plaza, 11th Floor, New York, N. Y., 10020 (212-246-1429).

NETHERLANDS ANTILLES—Netherlands Antilles Economic Mission, 866 UN Plaza, New York, N. Y., 10017 (212-421-3360).

NEW ZEALAND—Office of the Minister (Commercial), New Zealand Embassy, 1145 19th St., NW., Washington, D.C., 20036 (202-338-8820).

New Zealand Government Trade Commissioner, 630 Fifth Ave., New York, N. Y., 10021 (212-586-0060).

New Zealand Government Trade Commissioner, 153 Kearny St., San Francisco, Calif., 94108 (415-982-6780).

New Zealand Government Trade Commissioner, 510 West Sixth St., Los Angeles, Calif., 90014 (213-624-1491).

NICARAGUA—Embassy of Nicaragua, Commercial Section, 1627 New Hampshire Ave., NW., Washington, D.C., 20009 (202-332-1643).

NIGERIA—Consulate General of Nigeria, Attn: Nigerian Commercial Officer, 575 Lexington Ave., New York, N. Y., 10022 (212-752-1670).

Embassy of Nigeria, Office of Economic Affairs, 1333 16th St., NW., Washington, D.C., 20036 (202-234-4800).

NORWAY—Embassy of Norway, Attn: Commercial Attache, 3401 Massachusetts Ave., NW., Washington, D.C., 20007 (202-333-6000).

PAKISTAN—Pakistan Investment Center, Consulate General of Pakistan, 12 East 65th St., New York, N. Y., 10021 (212-879-5800).

PANAMA—Embassy of Panama, Attn: Commercial Counselor, 2862 McGill Ter., Washington, D.C., 20008 (202-387-7400).

Panama Government Investment Development Center, 405 Park Ave., New York, N. Y., 10022 (212-371-4343).

PARAGUAY — U.S.-Paraguay Trade Asso., 1134 National Press Bldg., Washington, D.C., 20004 (202-NA 8-9439).

PHILIPPINES—Embassy of the Philippines, Attn: Commercial Attache, 1617 Massachusetts Ave., NW., Washington, D.C., 20036 (202-265-2043 or 202-462-1400).

Office of the Commercial Attache, 17 Battery Pl., Rm. 309, New York, N. Y., 10004 (212-269-0840).

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, 6 North Michigan Ave., Suite 907, Chicago, Ill., 60602 (312-332-6458).

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, 2433 Pali Highway, Honolulu, Hawaii, 96817

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, 3075 Wilshire Blvd., Los Angeles, Calif., 90005 (213-384-8075).

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, L-275 World Trade Center, Ferry Bldg., San Francisco, Calif., 94111 (415-982-2354).

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, 1440 International Trade Mart, New Orleans, La., 70130 (504-524-2755).

Office of the Foreign Trade Promotion Rep., Philippine Consulate General, 835 Central Bldg., Third Ave. & Columbia St., Seattle, Wash., 98104 (206-MA 4-7703).

PORTUGAL—Casa de Portugal, 570 Fifth Ave., New York, N. Y., 10036 (212-581-2450).

ROMANIA—Romanian Trade Office, 95 Madison Ave., New York, N. Y., 10016 (212-532-4077).

SINGAPORE—Singapore Economic Development Board, 500 North Michigan Ave., Suite 42, Chicago, Ill., 60611 (312-644-3730).

Singapore Economic Development Board, 745 Fifth Ave., Suite 1509, New York, N. Y., 10022 (212-421-2203).

Singapore Economic Development Board, 44 Montgomery St., Suite 4261, San Francisco, Calif., 94104 (415-391-0756).

SPAIN—Commercial Office of Spain, 2558 Massachusetts Ave., NW., Washington, D.C., 20008 (202-265-8600).

Commercial Office of Spain, Chrysler Bldg., 32nd fl., 405 Lexington Ave., New York, N. Y., 10017 (212-661-4959).

Commercial Office of Spain, 55 E. Washington St., Chicago, Ill., 60602 (312-782-7799).

Commercial Office of Spain, Flood Bldg., Suite 542, 870 Market St., San Francisco, Calif., 94102 (415-397-1853).

Commercial Office of Spain, 1840 International Trade Mart, New Orleans, La., 70130 (504-524-1401).

SURINAM—Consulate General of The Netherlands, One Rockefeller Plaza, 11th fl., New York, N. Y., 10020 (212-246-1436).

SWAZILAND—Embassy of the Kingdom of Swaziland, 2233 Wisconsin Ave., NW., Washington, D.C., 20007 (202-362-6683).

SWEDEN—Swedish Industrial Development Corp., 63 E. 64th St., New York, N. Y., 10021 (212-628-0320).

TANZANIA — Embassy of Tanzania, 2721 Connecticut Ave., NW., Washington, D.C., 20008 (202-483-4116).

THAILAND—Bangkok Bank Ltd., 44 Wall St., New York, N. Y., 10005 (212-944-5925).

TRINIDAD & TOBAGO—Trinidad & Tobago Industrial Development Corp., 400 Madison Ave., Suite 712-714, New York, N. Y., 10017 (212-PL 5-9360).

TUNISIA—Embassy of Tunisia, 2408 Massachusetts Ave., NW., Washington, D.C., 20008 (202-AD 4-6644).

TURKEY—Turkish Embassy, Office of the Commercial Counselor, 2523 Massachusetts Ave., NW., Washington, D.C., 20008 (202-483-6366).

Turkish Embassy, Office of the Commercial Counselor, Rm. 542, Empire State Bldg., 350 Fifth Ave., New York, N. Y., 10001 (212-564-4880).

UGANDA—Embassy of Uganda, 5905 16th St., NW., Washington, D.C., 20011 (202-726-7100).

Commercial Sect., Permanent Mission of Uganda to the UN, 801 Second Ave., New York, N. Y., 10017 (212-689-3780).

The Uganda Coffee Marketing Board, 110 Wall St., New York, N. Y., 10005 (212-943-2410).

UNITED KINGDOM — The Director, British Trade Development Office, British Consulate-General, 150 E. 58th St., New York, N. Y., 10022 (212-593-2258).

H.M. Consul General, British Consulate-General, Suite 912, 225 Peachtree St., NE., Atlanta, Ga., 30303 (404-524-2691).

H.M. Consul General, British Consulate-General, Suite 4740, Prudential Tower, Prudential Center, Boston, Mass., 02199 (617-542-2810).

H.M. Consul General, British Consulate-General, 33 North Dearborn St., Chicago, Ill., 60602 (312-346-1810).

H.M. Consul General, British Consulate-General, 1828 Illuminating Bldg., 44 Public Square, Cleveland, Ohio, 44113 (216-621-7676).

H.M. Consul General, British Consulate-General, 1008 Detroit Bank & Trust Bldg., 211 Fort Street West, Detroit, Mich., 48226 (313-962-4776).

H.M. Consul General, British Consulate-General, 1005 World Trade Center, Houston, Tex., 77002 (713-223-2301/2/3/4).

H.M. Consul General, British Consulate-General, 3324 Wilshire Blvd., Los Angeles, Calif., 90010 (213-385-7381).

H.M. Consul General, British Consulate-General, 932 Ingraham Bldg., 25 S.E. Second Ave., Miami, Fla., 33131 (305-371-7544/5/6).

URUGUAY—Embassy of Uruguay, Commercial Sect., 1918 F St., NW., Washington, D.C., 20006 (202-628-1336).

YUGOSLAVIA—Embassy of Yugoslavia, 2410 California St., NW., Washington, D.C., 20007 (202-462-6566).

Yugoslav Consulate General, Attn: Economic Counselor, 488 Madison Ave., New York, N. Y., 10022 (212-838-2300).

Yugoslav Consulate General, 188 W. Randolph St., Suite 3000, Chicago, Ill., 60601 (312-332-0169).

Yugoslav Consulate General, 625 Stanwix St., Pittsburgh, Pa., 15222 (412-471-6191).

Yugoslav Consulate General, 1919 Sacramento St., San Francisco, Calif., 94127 (415-776-4941).

Yugoslav Federal Chamber of Economy Trade Office, 1900 Ave. of the Stars, Suite 758, Los Angeles, Calif., 90067 (213-553-2648).

Federal Economic Chamber of Yugoslavia, Mid-West Trade Office, 15 South Fifth St., Suite 1252, Minneapolis, Minn., 55402 (612-332-3961).

MULTINATIONAL ORGANIZATIONS —ADELA Development Corp. of the U.S., 1211 Connecticut Ave., NW., Washington, D.C., 20006 (202-296-3412).

International Finance Corp., 1818 H St., NW., Washington, D.C., 20433 (202-EX 3-6360).

International Finance Corp., 120 Broadway, New York, N. Y., 10005 (212-964-6100).

Overseas Private Investment Corp., 1129 20th St., NW., Washington, D.C., 20527 (202-632-1854).

Licensing, Investment Abroad

0100, 2000—VENEZUELA — Family enterprise seeks joint venture to expand **agricultural and industrial operations.** Produces sugar, alcohol, molasses, oranges, grapefruit, animal feeds and beef which are distributed through leading supermarket chains. Annual sales over $15 million. Investors invited to visit ranches and farms in Santa Barbara area. Write: Joaquin Brillembourg, Ave. Las Palmas, N° 26, La Florida, Caracas, Venezuela. WTD. P-71475

2000, 2800—PHILIPPINES—Large mining exploration and development firm seeks joint ventures or licenses to manufacture **cereal breakfast products, ice cream, soft drinks, cigarette filters and permapress chemicals.** Products will be marketed locally and possibly throughout Southeast Asia. Reports market potential for each product in the Philippines. Company is willing to set up separate firms for each venture. Write: Oliverio Laperal, President, Imperial Resources, Inc., Penthouse, J. M. Tuason, 303 Escolta, Manila, Philippines, WTD. P-71497

2011 — MEXICO — Group of investors seeks license or technical assistance contract for a modern **fresh meat aging process.** Investors presently have extensive interests in cattle raising and fresh beef marketing. Write: I. Howard Brown, President, Ramada Inns de Mexico, S.A., Apartado Postal 249, Monterrey, N.L., Mexico. P-71484

2111—PHILIPPINES—Firm seeks joint-venture or licensing arrangement with U.S. investors for **manufacturing and distributing cigarettes** in Philippines. Firm prefers to associate with firm whose cigarettes have well-known trade name. Equipment and technical assistance also desired. Firm has been in construction and real estate business for 12 years. Firm is reported to have a factory site ready, and sufficient capital for medium-sized plant. Write: Vivencio D. Antonio, Rooms 201-203, Insurance Center Building, 633, General Luna St., Intramuros, Manila, Philippines. WTD. P-71503

2812, 2819—CONGO—Project to establish **chemical complex** in Inga area where hydro-electric plant is under construction. Plans call for **manufacture of caustic soda, chlorine, hydrochloric acid, calcium carbide and polyvinyl chloride** (PVC), primarily for domestic market. Cost of project is estimated at $25 million. Foreign investors would provide majority of capital and technical know-how. Summary of project available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-71499

3079—JAMAICA—Manufacturer of bed rails and fittings seeks to diversify. Wants to produce *plastic products*, particularly PVC piping and fittings or household wares such as plates and cups under license. Firm has built a 10,000 sq. ft. plant to carry out its manufacturing operations. Write: George Smile. Smile's Engineering Works, 115 Windward Rd., Kingston 2, Jamaica. WTD. P-71498

3522 — ENGLAND — Farm implement manufacturer seeks to broaden its product line through license or joint venture. Presently makes precision hoes and drills, disc barrows and hydraulic loaders. Markets its equipment in EEC and EFTA countries, Australia, Africa and Canada. Has land available for expansion purposes. Write: Jeffery C. Davies, Deputy Managing Director, Ernest A. Webb Ltd., Exning, Nr. Newmarket, Suffolk, England. Pamphlets describing the concern's products available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. WTD. P-71485

3536, 3542—NEW ZEALAND—Licenses to manufacture **hydraulic presses** for use in the pulp and paper industries; forklift and crane attachments for materials handling, particularly in fields relating to the paper, pulp and wood industries; and hydraulic waste presses suitable for compacting textile, paper and metal waste. Currently the firm produces packaging machinery, presses, and materials handling and conveying systems. Annual sales exceed $50 million. Write: J. G. Miller, Marketing Manager, Production Engineering Branch, U.E.B. Industries, Ltd., P.O. Box 11059, Auckland 5, New Zealand. WTD. P-71487

3914—UGANDA—Joint venture for establishment of plant to manufacture **cutlery** such as knives, forks, tablespoons and teaspoons. No such plant currently exists in East Africa. Consumption in Uganda, supplied by imports, is three million pieces annually. Write: Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-71500

2429—TANZANIA—Collaborator for establishment of a $500,000 plant to manufacture **wood wool cement** slabs believed to have wide application for building materials in tropics. Market needs estimated at 220,000 square meters annually although detailed feasibility study not available. Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-71501

3679, 2514 — ENGLAND — Licenses to manufacture additional product compatible with present manufacturing and marketing facilities. The firm makes **radio and television aerials; also rotary clothes dryers, folding tables and other products using aluminum tubing.** Claims to have strong distribution network; supplies aerial equipment to government and local agencies. Write: J. W. Woods, Managing Director, J. Beam Aerials Ltd., Rothersthorpe Crescent, Northampton, England. WTD. P-71488

7011—KENYA—Kenya Tourist Development Corp. seeks collaborator for the establishment of a company for **management and development of hotels, game lodges and other tourist projects** in Kenya. Interested associates should provide feasibility services, market surveys, building conceptions, interior design, furnishing and equipping, day-to-day accountancy, personnel selection, and sales promotion and marketing. Applications should reach the General Manager, Kenya Tourist Development Corp., P.O. Box 42013, Nairobi, Kenya, East Africa, before Nov. 15. P-71502

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

For additional information on opportunities to manufacture foreign firm's products in the U.S. described under "Licensing In U.S.", write Commerce's Office of International Investment, BIC-874, or call 202-967-2248 referring to the File Number assigned each opportunity.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

Licensing In U.S.

For additional information on opportunities to manufacture foreign firms' products in the U.S., write Commerce's Office of International Investment, BIC-874, Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C. 20230, (202-967-2248) referring to the appropriate File number assigned each opportunity listed below.

2899—CANADA—An established firm offers a manufacturing license for its **fabricated wood veneers for furniture manufacturing** to a U.S. firm. The product is a wood veneer sandwiched between a clear plastic surface and a rigid substrate hardboard. An "open-pore" appearance is thereby gained. Reportedly the product has a wide application in furniture and related manufacturing. Special features include unusual durability, ease of maintenance and an ideal base for "Vee-grooving" as the plastic surface forms the "hinge." **File 2094**

3079—SWITZERLAND—An established manufacturer of a newly patented **plastic device for application in the building and prefabricated concrete parts industry** offers a manufacturing license to a U.S. firm. These devices hold crossed strands of concrete reinforcing steel together in the construction phase and remain permanently embedded in the concrete. **File 2095**

3535—SWITZERLAND—An established manufacturing and distributor of **conveying systems used in apparel and lightweight industries** and warehouses offers manufacturing rights to a U.S. company for their conveying and storage systems. These would be of interest to materials handling equipment manufacturers. The manufacturer claims storage space savings of up to 50 percent and considerable speed in the manufacturing and distribution processes. **File 2096**

3561 — SWITZERLAND — A manufacturer of **pumps and related auxiliary** equipment offers manufacturing licenses for the same to a U.S. company. Licensing agreements reportedly have been concluded with firms in almost all industrialized countries except the United States. The pumps can be equipped with completely free passage for sewage, centrifugal, or special stock and half axial screw impellers. The operation of these pumps is based on the principle of the hydrodynamic liquid coupling used for transmitting hydraulic energy. **File 2097**

3964—SWITZERLAND—A Swiss manufacturer specializing in the production of **electronically controlled high precision riveting machinery** offers a manufacturing license for its fastening machinery line. The machinery is presently being used in the European watch, electronics, precision machine and instrumentation industries. A new automatic model is equipped with two interchangeable, pneumatically controlled feeding units. **File 2098**

Visiting Buyers And Officials

ECUADOR—Ag. Eng. Jorge L. Escudero, General Manager, Comercial Automotriz S.A., P.O. Box 546, Guayaquil, interested in importing **automotive parts and accessories** and requesting technical information. Oct. 8 via Miami for 30 days. c/o Lancaster Hotel, Madison Ave. and E. 38th St., New York, N.Y. 10016. Itinerary: New York, Philadelphia, Akron and Toledo, O., Chicago, New York, Miami. WTD 6/71.

FRANCE — Jean Chomarat, General Manager, Francois Petitjean, Foreign Dept. manager, and Alain Pillot, sales manager for France, representing A. Chomarat & Cie., 9 place des Victoires, Paris 2eme, interested in contacting U.S. **synthetic knitters, dyers and printers of synthetic jerseys** to establish reciprocal technical assistance and requesting technical information. Nov. 1 via New York for 8-10 days. c/o French Commercial Counselor, 1301 Avenue of the Americas, New York, N.Y. 10019. Itinerary: New York, Chicago, Los Angeles. WTD in prep.

ISRAEL—Elisha Almagor, Director, Exhibitions Company Ltd., (Yerid Hamizrakh) P.O. Box 21075, Tel Aviv, interested in meeting U.S. manufacturers to discuss **Tel Aviv international trade fairs.** Oct. 23 via New York until Nov. 14. c/o Israel Communications, Inc., 110 E. 59th St., New York, N.Y. 10022, (212-HA1-5547; Israeli Consulates; Joseph Amter, 1755 Stout Ave., Denver, Colo. 80202. Itinerary: 11/1-3 San Francisco, 11/4-6 Denver, 11/7-9 Chicago, 11/10-14 New York.

NETHERLANDS—Karel van Sante, Export Manager, Metaalwarenfabriek van Geel N.V., 76 van Salmstraat, Boxtel, interested in meeting U.S. manufacturers of **cable trays, floor cable trunking systems, service fittings,** related products to discuss direct purchase and/or licensing arrangements, and consulting engineers specializing in this field. Oct. 23 via New York until Nov. 8. Itinerary: 11/1 Parkersburg, W. Va., 11/2-8 New York c/o Piccadilly Hotel, 227 W. 45 St., New York, N.Y. 10036. WTD 2/71.

SOUTH AFRICA—Leslie C. Jenkinson, Managing Director, Grapnel Silencers (Pty.) Ltd., P.O. Box 1098, Parow, Cape Town, interested in direct purchase of **pipe bending and muffler manufacturing equipment** and securing **licensing agreement with U.S. muffler manufacturer to make its line of products in South Africa.** Oct. 30 via New York, for 15 days. c/o C. Smith, Department of Accounting, Mackenzie Hall, U. of Washington, Seattle, Washington 98105. Itinerary: New York, Chicago, Seattle, Los Angeles, Riverside, Westminster and Studio City, Calif., Denver. WTD 10/71.

AFGHANISTAN — Zohurridin Sahibzada, Sahibzada Trading House, Mohd. Jan Khan Wat, Kabul, interested in purchasing **sanitary products, household goods, tableware, air coolers, air conditioners, sport articles** and in locating market for **Afghan sheepskin jackets.** Second week Oct. via New York for 6-9 mos. c/o A Dastagirzada, 14 Frost Lane, Newlet, New York, N.Y. 11557. Itinerary: New York, Washington, D. C., cities in Illinois, Colorado, Wyoming, Los Angeles. WTD 7/70

New Trade Lists

The Bureau of International Commerce has published the following Trade Lists, of which mimeographed copies may be obtained by firms domiciled in the United States from BIC-924, Department of Commerce, Washington, D.C. 20230, and from Department of Commerce Field Office. The price is $1 per list.

Business Firms—Ivory Coast, Sept.
Business Firms—Jamaica, Sept.
Business Firms—Jordan, Sept.
Business Firms—Kenya, Sept.
Business Firms—Kuwait, Sept.
Business Firms—Malawi, Sept.
Business Firms—French West Indies, Sept.
Business Firms—French Guiana, Sept.
Business Firms—Ireland, Sept.
Business Firms—Leeward & Windward Islands, Sept.
Business Firms—Liberia, Sept.
Business Firms—Libya, Sept.
Business Firms—Malagasy Rep., Sept.
Business Firms—Malta, Sept.
Business Firms—Mauritius, Sept.
Business Firms—Neth. Antilles, Sept.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230.

Direct Sales

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Grain mill products

20460—KENYA — Liquid glucose pure white made from maize for manufacture of biscuits, confectionery in following specifications: liquid glucose of 43° Be. and 45° Be. Packing in either new steel drums of 44 gallons or secondhand but reconditioned. Gathani Ltd. (importer, dist., agent), P.O. Box 18061, Nairobi. WTD 1/71.

Food preparations

20922—PORTUGAL — Soybean meal for feed compounders, approximately 3,500 metric tons per yr. UNIAGRI-União de Cooperativas Agricolas do Noroeste Português, S.C.R.L. (mfr.), Apartado 21, Vale de Cambra. WTD in prep.

Broad woven fabric mills, cotton

22110—JAMAICA—Strong cot canvas in colors for manufacturing canvas chairs. Quotations c.i.f. Kingston. Jerrie Isaacs, Attn: Jerrie Isaacs (mfr.), 128 Duke St., Kingston. WTD in prep.

Knitting mills, products

22524—GUYANA—Men's, women's, children's seamless cotton and silk hosiery, socks, textured nylons. G. Bettencourt & Co., Ltd. Attn: John Vibart I. Henriques—Mng. Dir. (dist., agent, retailer), 19/20 Water St., P.O. Box 258, Georgetown. WTD 8/71.

Yarn, thread mills, products

22831 — AFGHANISTAN — Embroidery yarn. Quote c.i.f. Karachi prices. Zenith Leather Works, Ltd. (importer, mfr., exporter), Mohammed Jan Khan Wat, P.O. Box 347, Kabul. WTD in prep.

22842—ALGERIA—Cotton thread for the weaving of turkish towels; fineness 1/20-2/34 and 2/40 "denier sur cônes", bleached and dyed: cotton (100%)-Nr. woof: 1/30-warp: 2/56; 2/36 warp: 1/14 unbleached and dyed; cotton/fibranne (80/20%)-Nr. woof: 1/30-warp: 2/56 unbleached and dyed "sur cônes"; cotton/fibranne (50/50%): Nr. woof: 36/2-warp: 1/14 unbleached and dyed "sur cônes"; polyester/cotton (65/35%)-Nr. woof: 50/1-warp: 95/2 bleached and dyed "sur cônes"; polyester/wool (55/45%)-Nr. woof: 1/20 warp: 2/40 unbleached and dyed "sur cônes"; acrylic/fibranne (50/50%) Nr. woof: 1/24-warp: 2/48 unbleached and dyed "sur cônes". International Trade & Manufacturers Agency (importer, mfr.), 12, rue Ali Boumendjel, Algiers. WTD in prep.

Women's, misses', children's, infants' under garments

23412 — GUYANA — Women's, misses', children's underwear including panties, brassieres, girdles. G. Bettencourt & Co., Ltd. Attn: John Vibart I. Henriques—Mng. Dir. (dist., agent, retailer), 19/20 Water St., P.O. Box 258, Georgetown. WTD 8/71.

Building paper, building board mills

26612—COLOMBIA—Insulating impregnated paper for gaskets. "El Surtidor"—Carlos A. Rodriguez (dist., mfr., retailer), Calle 5a. No. 4-55 Fontibon, Bogota. WTD in prep.

Petroleum refining

29100—INDIA—Indian Oil Corp., Ltd. (IOC) plans to buy the following items on a regular basis and wishes to enter into a supply arrangement with U.S. firms. Purchases will be "large" and "frequent" of aviation lubricants and greases, gear lubricant multi-purpose grade oils, special lubricants and greases of different types and various specifications. Contact Indian Oil Corp., Ltd. (Marketing Division), 254—C Drive, Anne Besant Road, Prabhadevi, Bombay 25-DD (Attention: J. Jayaraman, Commercial Manager).

29110 — JAMAICA — "Welsh" coke in large pieces for lead smelting blast furnace purposes (fine pieces unuseable). Annual consumption of 150 tons to be delivered quarterly. Quotation: c.i.f. Kingston. Jamaica Metal Refining Co. Ltd., Attn: Michael Canton (mfr.), 14 Ashenheim Rd., P.O. Box 148, Kingston. WTD 6/71.

Footwear, except rubber

31410—GUYANA—Men's, women's, children's shoes of special design. G. Bettencourt & Co., Ltd. Attn: John Vibart I. Henriques—Mng. Dir. (dist., agent, retailer), 19/20 Water St., Georgetown, P.O. Box 258, WTD 8/71.

Abrasive, asbestos, nonmetallic mineral products

32927 — COLOMBIA — Asbestos flat sheets, cord. "El Surtidor"—Carlos A. Rodriguez (dist., mfr., retailer), Calle 5a. No. 4-55-Fontibón, Bogota. WTD in prep.

32932—COLOMBIA—Gaskets, all kinds for cylinder heads. "El Surtidor"—Carlos A. Rodriguez (dist., mfr., retailer), Calle 5a. No. 4-55-Fontibón, Bogota. WTD in prep.

Cutlery, hand tools, general hardware

34292 — JAMAICA — Hardware used in making canvas chairs including metal studs, buckles. Jerrie Isaacs, Attn: Jerrie Isaacs (mfr.), 128 Duke St., Kingston. WTD in prep.

Heating apparatus, plumbing fixtures

34320 — FRANCE — Plumbing fixtures such as faucets, shower fittings, shower heads. SOFRINEL S.A.R.L. (importer, agent), Route de Faulquemont, 57—Longeville-les-St-Avold. WTD 9/71.

34333 — FRANCE — Central heating equipment. SOFRINEL S.A.R.L. (importer, agent), Route de Faulquemont, 57—Longeville-les-St-Avold. WTD 9/71.

Engines, turbines

● **35100—PANAMA**—Supply, erect, inspect four penstocks for Francis-type 105,000 h.p. turbines, two disheads, two scour vent pipes equipped with Dresser couplings and related vent pipes. Bid

No. 258, bid deadline Jan. 13. To be installed in Bayano hydroelectric project, which has World Bank financing. Proposals, plans and specifications available for review at Panamanian Embassy, 2862 McGill Terrace, NW., Washington, D.C., 20008, and Stone and Webster Engineers, 90 Broad St., New York, N.Y., 10004. Complete set of documents available for $50 from Instituto De Recursos Hudraulicos Y Electrificacion, Edkficio Poli, Avda. Justo Arosemena Y Calle 27, Panama City.

● **35100—PARAGUAY**—Supply two (2) gas turbo-alternators for installation of two (2) 15mw. generators at San Lorenzo. Inter-American Development Bank Loan 304/SF-PR; bid deadline Nov. 16. Administracion Nacional de Electricidad (ANDE) estimates total San Lorenzo project at $4 million. Papers and documents available for $5 from Division de Adquisicions, Departamento de Licitaciones, ANDE, Calle Pedro Cardozo, Asuncion.

Construction, mining, materials handling machinery, equipment

35318—JAPAN—Trucks or trailers, or devices to attach thereto, for handling motor boats, from 25′ x 9′ (400 lbs.) to 7′ x 4′ (55 lbs.) in size. Fed. of Transportation Cooperative Assns. of Fukuoka Prefecture, 13-26 Tsumashoji, Fukuoka City. WTD in prep.

Metalworking machinery

● **35400—SUDAN**—Heavy duty centre lathe, 1000mm. swingover bed, 710mm. swingover saddle, 3000mm. between centers, 40 k.w. motor. Bid deadline Nov. 13. Manager Supplies, the Sudan Gezira Board, Barakat. Copies of specifications are available from Metalworking Equipment Program, BDC-774, U.S. Department of Commerce, Washington, D.C., 20230. ★(202-967-5652).

● **35400—SUDAN**—Machine tools, including: One punching and shearing machine suitable for cutting iron up to 1″ thick, and one universal miller with 40″ × 10¼″ working surface. Bid deadline Nov. 20. Manager Supplies, The Sudan Gezira Board, Barakat. Copies of specifications are available from Metalworking Equipment Program, BDC-774, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-5652).

35415 — FRANCE — Machine tools with numerical control: lathes. Société Métallurgique du Sud-Ouest (importer, retailer), 40 blvd. Riquet, 31-Toulouse. WTD in prep.

35416 — FRANCE — Machine tools with numerical control: milling machines. Société Métallurgique du Sud-Ouest (importer, retailer), 40 blvd. Riquet, 31-Toulouse. WTD in prep.

35420 — NORWAY — Numerically controlled turret punch press for sheet metal work to handle minimum 24 stations; maximum sheet stock to be punched 36″ × 36″ × ¾″. A/S Elektrisk Bureau, Attn: Mr. Øivind Clausen, Section PRM (mfr.), Middelthunsgate 17, Oslo 3. WTD 4/71.

35420—VIET NAM — Machinery, equipment for manufacture of sewing machine parts including head, stand, table. Specifications available from International Business Opportunities, BDC-584, Rm. 3515, U.S. Dept. of Commerce, Washington, D.C. 20230. Cong Ty May May Standard, 57-59 Ham Nghi, P.O. Box 2600, Saigon. WTD in prep.

35442 — COLOMBIA — Rotational molds for plastics-working machinery (rotational molding). Firm has thermo-box "Krauss-Maffei" (German) machinery for moulding plastic products. Manufacturas Ajover Ltda. (importer, dist., mfr.), Calle 23 A No. 27-03, Apartado Aereo 4911, Bogota. WTD 9/71.

Special industry machinery

35511 — ENGLAND — Ice cream equipment for enrobing and wrapping ice cream bars, related equipment for manufacture of ice cream bars, all types of specialties. Hortons Frozen Products Ltd., Attn: I. B. Calderwood, Jt. Managing Dir. (mfr.), 61 Palmerston Rd., Bournemouth, Hampshire. WTD in prep.

35512—NETHERLANDS—Candy wrapping machines; bag forming, filling, closing machines. Peja Technische Handelmaatschappij N.V. (importer), Steenstraat 99, P.O. Box 117, Arnhem. WTD in prep.

35513—INDIA—One milling plant of 100 metric tons capacity per day for dry milling of maize. Kirloskar Consultants Ltd. (marketing, technical consultants), 917/19A Shivajinagar, Fergusson College Rd., Poona 4. WTD in prep.

35513—NETHERLANDS—Cocoa, chocolate industry machinery. Peja Technische Handelmaatschappij N.V. (importer), Steenstraat 99, P.O. Box 117, Arnhem. WTD in prep.

35513 — PHILIPPINES — One (1) unit, tube-like macaroni making machine. Victor Cadiz (importer, dist., mfr.), 57 Poblacion, Meycauayan, Bulacan. WTD in prep.

35521—AFGHANISTAN — Embroidery machines for textiles; small size. Quote c.i.f. Karachi prices. Zenith Leather Works, Ltd. (importer, mfr., exporter), Mohammed Jan Khan Wat, P.O. Box 347, Kabul. WTD in prep.

35531 — PHILIPPINES — One (1) unit, lollipop stick (wood, round type) making machine. Victor Cadiz (importer, dist., mfr.), 57 Poblacion, Meycauayan, Bulacan. WTD in prep.

35532—COLOMBIA — Multi-drilling machinery for lumber. Col-Maderas Ltda. (dist., retailer, exporter), Calle 34 No. 38-46, Apartado Aereo 867, Barranquilla. WTD in prep.

General industry machinery

● **35600 — TANZANIA** — 184 borehole pumps of 13 different capacities, reciprocal or rotary type, complete with diesel engine as prime mover, V-belt drive or gear, rods or tubes of total length corresponding to the lifting height and common baseplate for the machinery above the borehole. Tender number not specified; bid deadline Nov. 13. Secretary, Central Tender Board, P.O. Box 49, Dar es Salaam. Telegraphic tenders will not be accepted. Specifications available on a short term loan basis to firms domiciled in the U.S. from the General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-4317)

35690—CANADA—Electrostatic filter effective in removing particles in 0-01 micron range for electrostatically cleaning or filtering transformer oil. Quotations c&f Hamilton with complete insurance coverage from plant to plant. Include complete details of any hydraulic and electrical equipment required. Quote using Westinghouse equipment and equipment of local manufacture. Canadian Westinghouse Co. Ltd., Power Transformer & Circuit Breaker Div., Attn: A. A. Davies-Buyer (mfr.), P.O. Box 510, Hamilton, Ontario.

Office, computing, accounting machines

35720—CANADA — Typewriters. NTI National Inc., Attn: Frank Rubin, sec. treas. (importer, dist.), 700 St. Jacques, Montreal 101, Quebec. WTD in prep.

35731—CANADA—Electronic computing equipment. NTI National Inc., Attn: Frank Rubin, sec.-treas (importer, dist.), 700 St. Jacques, Montreal 101, Quebec. WTD in prep.

35733 — ENGLAND — Industrial data processing equipment, dimension gauging, electronic capacitive or differential transformer type. Girling Ltd., Industrial Products Div., Attn: Mr. Mills (importer, dist., mfr.), Grange Works, Cwmbran, Monmouthshire. WTD in prep.

35733 — ENGLAND — Data processing peripherals such as magnetic tape, fixed or removable disc drives, paper tape devices, printers. Pragma Ltd. (importer, dist.), Middlesex House, 29 High St., Edgware, Middlesex HA8 7UU. WTD in prep.

35741—CANADA—Calculating, accounting machines. NTI National Inc., Attn: Frank Rubin, sec.-treas. (importer, dist.), 700 St. Jacques, Montreal 101, Quebec. WTD in prep.

35791—JAMAICA — Teaching systems: audio-visual Spanish language teaching system for use in training language teachers and for teaching students in primary, secondary schools. Technical literature, assistance welcomed. Ministry of Education: Program Officer—Mrs. Gloria Astwood, 5 South Race Course, Kingston 4.

Service industry machines

35853 — NETHERLANDS — Soft drink dispensers, beer coolers, drinkwater coolers, parts. Representations for Western Europe. W. van West & Zonen N.V.; Attn: R. E. Erdmann (importer, dist., mfr.), Europaweg 4, Heerde. WTD 6/71.

35892—ITALY—Home water biological purification equipment except standard water filters, softners. Copier, S.r.l. (importer, dist., agent), Circonvallazione Ostiense 260/262, 00154 Rome. WTD 10/71.

Electric transmission & distribution equipment

● **36100—GREECE**—Supply 80 outdoor metallic resistances intended for neutral grounding of 20 kv. windings of 150/20 kv. transformers. Inquiry No. DMKM-2109-DED-1835/B2, bid deadline Nov. 19. Public Power Corp., 30, Chalkokondyli St., Athens 102. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **36100 — THAILAND** — Supply three sets of 15 kv. load break oil switches, metal-clad fuses, power fuse holders, refill units and cubicle equipment. Tender No. MEA PSD 260; bid deadline Nov. 22. Purchases & Stores Dept., Metro-

politan Electricity Auth., 121 Chakpetch Rd., Bangkok 2. Specifications available on a short term loan basis to firms domiciled in the U.S. from the General Industries Division, Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **36100—THAILAND** — Supply twelve three-phase sets of 69 kv. circuit breakers, outdoor type, 2,000 ampere continuous rating with 5,000 MVA. Tender No. MEA PSD 261; bid deadline Nov. 25. Purchase & Stores Dept., Metropolitan Electricity Auth., 121 Chakpetch Rd., Bangkok 2. Specifications available on a short term loan basis to firms domiciled in the U.S. from the General Industries Division, Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **36100 — THAILAND** — Supply six Power Transformers, 69 kv. with load tap changing equipment. Tender No. MEA-PSD-258, bid deadline Nov. 15, Purchases & Stores Dept., Metropolitan Electricity Auth., 121 Chakpetch Rd., Bangkok 2. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **36100—THAILAND** — Supply twelve power distribution transformers, conventional type, 167 KVA. Tender No. MEA-PSD-259, bid deadline Nov. 18. Purchases & Stores Dept., Metropolitan Electricity Auth., 121 Chakpetch Rd., Bangkok 2. Specifications available on a short term loan basis to firms domiciled in the U.S. from Power and Electrical Equipment Program, BDC-776, U.S. Dept. of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **36100—THAILAND**—Supply distribution transformers for transmission line and substation expansion project. Tender No. A-012, bid deadline Dec. 8, Electricity Generating Auth. of Thailand (EGAT). Foreign Purchasing Sect., Procurement Div., Supply and Procurement, Nonthaburi. Bidding documents available from EGAT at $25 per set. Only bids from member countries of Asian Development Bank are eligible.

Electrical industrial apparatus

● **36200 — SOUTH AFRICA** — Supply electrical equipment for the conventional/universal beam mill. Tender P944, bid deadline Dec. 15. The Head, Capital Buying, (ISCOR) South African Iron and Steel Industrial Corp. Ltd., P.O. Box 450, Pretoria, Transvaal, will supply inquiry documents against a deposit of $140 which will be refunded upon receipt of a bona fide tender.

● **36200 — SOUTH AFRICA** — Supply electrical equipment (motors and attachments) for a semi-continuous billet mill and auxiliary equipment with reheating furnaces. Tender No. 35, bid deadline Nov. 16, The Head, Capital Buying, South African Iron and Steel Industrial Corp. Ltd. (ISCOR), P.O. Box 450, Pretoria, Transvaal. Enquiry documents obtainable from ISCOR against a refundable deposit of $140, to be refunded on receipt of bona fide tender.

● **36200 — SOUTH AFRICA** — Supply electrical equipment for a continuous merchant bar mill and reheat furnace. Tender No. 24, bid deadline Dec. 6. Enquiry documents may be purchased for $140 at The Head, Capital Buying, South African Iron and Steel Industrial Corp., Ltd., P.O. Box 450, Pretoria, Transvaal. Purchase price will be refunded upon receipt of a bona fide tender.

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

20710—CANADA — Confectionery products; additional line for distribution with possible eventual manufacture under license. Direct purchase & agency. Mr. D. Kennedy, Rondells Co. (dist.), P.O. Box 270, Hamilton, Ontario.

24290—GERMANY — Wood chips. Jabs, Schuett & Co. (agent), 2 Hamburg 11, Teilfeld 8. WTD 1/71.

26211—GERMANY — Newsprint; wood pulp for papermaking. Jabs, Schuett & Co. (agent), 2 Hamburg 11, Teilfeld 8. WTD 1/71.

26215—GERMANY — Fine paper. Jabs, Schuett & Co. (agent), 2 Hamburg 11, Teilfeld 8. WTD 1/71.

26432—CANADA—Film type polyethylene bag and/or woven polyethylene laminated bag for shipping asbestos fiber. Bag material should retain sifting of asbestos fiber. Asbestos Fibre Division of Canadian Johns-Manville Co. Ltd., Attn: S. P. Griffin, Purchasing Mgr. (mfr., exporter), Asbestos, Quebec. WTD in prep.

35531—VIET-NAM — Machinery, equipment for plywood plant. Specifications available from International Business Opportunities, BDC-584, Rm. 3515, U.S. Dept. of Commerce, Washington, D.C. 20230. A Chau Ky Nghe Van Ep Cong Ty (ASIAPLYCO) (importer, dist., mfr.), 254 Le Quang Liem, Cholon. WTD in prep.

35540—JAMAICA—Automatic carton making machine; specifications: 50 cycles; voltage 220, three phase; capable of making 1 million boxes monthly in varying sizes. Can be either new or reconditioned unit. Quotations: c.i.f. Kingston. Jamaica Boxmaking Co. Ltd.; Attn: Owen West (mfr.), 6 Lissant Rd., Kingston. WTD in prep.

35791 — CANADA — Addressing, dictating, duplicating, other office, store machines. NTI National Inc., Attn: Frank Rubin, Sec. Treas. (importer, dist.), 700 St. Jacques, Montreal 101, Quebec. WTD in prep.

36220—ENGLAND—Electronic controls, instruments or systems for use by industry. Telemotive U.K. Ltd. (importer, dist., mfr.), Albany House, 32 Southfields, East Molesey, Surrey KT8 OBP. WTD in prep.

36220—INDIA—Pump controls for controlling water level in boiler shells with low water alarm, burner cut out and high water alarm. Controls should be suitable for 150 PSI and 250 PSI maximum pressure. Westerwork Engineers Pvt. Ltd., Attn: K. I. Ajwani (mfr.), 15 Bhandup Village Rd., Bhandup, Bombay 78 NB. WTD in prep.

Communication equipment

36623—ITALY—Burglar and fire alarm equipment and any new and technologically advanced safety devices including perimetral intrusion alarm systems for bank buildings; hydrocarbon gas explosion warning systems. Copier, S.r.l. (importer, dist., agent), Circonvallazione Ostiense 260/262, 00154 Rome. WTD 10/71.

Electronic components, accessories

36740 — GERMANY — Semiconductors. Willi Jung KG (importer, dist.), Adam-Karrillon-Str. 25/27, 6500 Mainz. WTD 10/71.

36790—GERMANY—Electronic components, NEC, for industrial applications. Willi Jung KG (importer, dist.), Adam Karrillon-Str. 25/27, 6500 Mainz. WTD 10/71.

Engineering, laboratory, scientific & research instruments & equipment

● **38100 — BURMA** — Supply of soil sampling kits, power earth augers, post or blade augers, crushing and screening plant. Tender No. 106/12, bid deadline Dec. 10. Invited by the Director-General, Mineral Development Corp., Rangoon. Terms and specifications available on short term loan basis from the Business and Scientific Equipment Division, BDC-708, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2939.)

Instruments for measuring, indicating controlling physical characteristics

● **38200—ALGERIA**—The Embassy of the Republic of Guinea, Algerian Interests Section, announces an international bid by SONELGAZ (National Society of Electricity and Gas) for the creation of a manufacturing unit of meters to measure the amount of water, gas, and electricity used. Invited by SONELGAZ, Direction Generale, Boulevard Salah Bouakouir, Alger. Specifications are available from the Algerian Interests Sect., 2118 Kalorama Rd., NW., Washington, D.C., 20008. ★(202-234-7246.)

38216 — FRANCE — Measuring instruments of stainless steel for milk, chemical industries. SOFRINEL S.A.R.L. (importer, agent), Route de Faulquemont, 57-Longeville les St Avold. WTD 9/71.

Office materials

39550—CANADA — Typewriter ribbons. NTI National Inc., Attn: Frank Rubin, sec.-treas. (importer, dist.), 700 St. Jacques, Montreal 101, Quebec. WTD in prep.

Libya Announces Tenders On Telephone Cable Network

Libya's Posts and Telecommunications Corp. has issued tender no. 22/71 for the supply construction and installation of a telephone cable network for the city of Derna. Bid deadline is Nov. 20. Copies of tender announcement and specifications are available from the Financial Div., Posts and Telecommunications Corp., second floor, Municipality Bldg., Alger Square, Tripoli against payment of 200 Libyan dinars (U.S. $560).

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Meat Products

20111—FRANCE—Beef. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20112—FRANCE—Veal. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20114—FRANCE—Pork; fresh, frozen. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20118—FRANCE—Canned meats (beef, veal, pork), canned sausages. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20153 — FRANCE — Frozen poultry (chickens, turkeys). Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

Canning, preserving foods

20310—FRANCE—Canned fish. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20352—FRANCE—Pickles, pickled products. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20353—FRANCE—Meat sauces. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20361—FRANCE—Frozen fish or shellfish. Centre-est Viandes (dist), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

20373—FRANCE — Meat, frozen (incl. offals). Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

Food preparations

20999—FRANCE—Pepper, other spices. Centre-est Viandes (dist.), 12, rue du Quatre Septembre, 75—Paris 2e. WTD in prep.

Broad woven fabric mills, cotton

22110 — SWITZERLAND — Printed and plain fabrics, cotton; for manufacture of ladies' wear, first class. Request payment terms C.O.D. or 30 days upon receipt of invoice. Léon Lévy (importer, commission agent), Keuzbuehlstrasse 1, 8007 Zurich. WTD in prep.

Broad woven fabric mills, manmade fiber, silk

22210 — SWITZERLAND — Printed and plain fabrics and jerseys, manmade fiber, silk, for manufacture of ladies' wear, first class. Requests payment terms C.O.D. or 30 days upon receipt of invoice. Léon Lévy (importer, commission agent), Kreuzbuehlstrasse 1, 8007 Zürich. WTD in prep.

Broad woven fabric mills, wool

22310 — SWITZERLAND — Printed and plain fabrics and jerseys, wool, for manufacture of ladies' wear, first class. Requests payment terms C.O.D. or 30 days upon receipt of invoice. Léon Lévy (importer, commission agent), Kreuzbuehlstrasse 1, 8007 Zürich. WTD in prep.

Dyeing, finishing textiles, except wool fabrics, knit goods

22690—VIET NAM—Cotton yarns: in hanks or on cone; count range: 22/1; 32/1; 42/1; 40/2; 50/3; 60/2; 60/1; 80/2. Quotations and samples requested. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

Men's, boys' furnishings

23214—FRANCE—Men's cotton dress shirts. DEHAYE Jacques (importer), Résidence Saint Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

23215 — FRANCE — Men's cotton pajamas. DEHAYE Jacques (importer), Résidence Saint Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

23230—FRANCE—Pure silk neckties. DEHAYE Jacques (importer), Résidence St. Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

23292—FRANCE—Men's bathing suits, beach-wear. DEHAYE Jacques (importer), Résidence Saint Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

Women's, misses', juniors' outerwear

23393—FRANCE—Pure silk, manmade fibers scarves; women's bathing suits, beachwear. DEHAYE Jacques (importer), Résidence Saint Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

Women's, misses', children's, infants' under garments

23412—FRANCE—Pure silk, knit fabrics women's underwear. DEHAYE Jacques (importer), Résidence Saint Michel, B.P. 280, Avenue du Roi Albert, 06 Cannes. WTD 4/71.

Miscellaneous apparel, accessories

23850—SWITZERLAND—Skiers' waterproof nylon overalls, incl. children's. Agimport SA, Attn: Rudolf H. Haussener, Pres. (importer, dist.), 3 chemin de la Fontaine, 1094 Paudex Lausanne. WTD in prep.

23850—SWITZERLAND—Infants' pants and diaper covers, other baby rubberized or plastic garments. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

Partitions, shelving, lockers, office, store fixtures

25420 — SWITZERLAND — Specialty metal store fixtures, tray stands, display fixtures, novelties, for supermarkets, department, chain stores. Exclusive agency. Photo-Scan AG (importer, dist., assemblers), Engimattstrasse 22, 8002 Zurich. WTD 10/71.

Industrial chemicals

28180—VIET NAM—Industrial chemicals including borax 99.5%; soda ash light 99%; dense soda ash (99%), calcium hypochlorite 97-98%; caustic soda. Quotations, descriptive printing materials, samples requested. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

Synthetic materials

28213—VIET NAM—Cellophane sheets, rolls for use in tobacco, confectionary industry. Quotations, samples requested. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458 Saigon. WTD 8/71.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28440 — SWITZERLAND — Sportsmen's and women's quality cosmetics, toiletries, such as lip cream, sun lotions, high altitude preparations, and similar items. Agimport SA, Attn: Rudolf H. Haussener, Pres. (importer, dist.), 3 chemin de la Fontaine, 1094 Paudex Lausanne. WTD in prep.

28445 — SWITZERLAND — Baby care preparations. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

Paints, varnishes, lacquers, enamels

28511 — SWITZERLAND — Automobile base and refinish paints. Requests offers from manufacturers only. Walter Kunz (importer, dist.), Neubrunnenstrasse 38, 8050 Zurich. WTD in prep.

28517 — SWITZERLAND — Automotive acrylic enamels, lacquers, in bulk and consumer packaged, incl. aerosol. Requests offers from manufacturers only. Walter Kunz (importer, dist.), Neubrunnenstrasse 38, 8050 Zurich. WTD in prep.

Agricultural chemicals

28711—PAKISTAN—Diammonium phosphate, granular free flowing; nitrogen content, 18% as N minimum; phosphorous content, 46% as P-2°5 minimum; water soluble P-2°5 (percent of available P-2°5), 90% minimum; moisture content, 2% minimum as H-2° maximum; screen size, 85%-6/16 mesh minimum. Packing: jute bags 50 kilo; net new jute over bags made from 10 oz./40 in., 11 porter into 12 shots hessian. Jute over bags should be new, single and of exportable quality, finely woven and strong enough to be delivered in sound and fit condition at ports of discharge and for onward dispatch to internal centers in Pakistan by railway or road. Bags to be of uniform size and weight. Bags will be inspected before dispatch. Import of 80,000 tons in monthly installments of about 8,000 tons, first consignment to be delivered February 1972, preferably on barter deal, or under aid or loan. MAK International (importer, agent), P.O. Box 1065, Lahore. WTD 9/71. Cable: FORESIGHT.

Fabricated rubber products

30697 — SWITZERLAND — Druggist, medical rubber sundries. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

30698 — SWITZERLAND — Household rubber goods, all kinds. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

Plastic products

30790 — SWITZERLAND — Druggist, medical and household plastic goods.

Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

Leather gloves, mittens

31510 — SWITZERLAND — Fine leather sport gloves, in particular for skiers. Agimport SA, Attn: Rudolf H. Haussener, Pres. (importer, dist.), 3 chemin de la Fontaine, 1094 Paudex Lausanne. WTD in prep.

Rolling, drawing, extruding of nonferrous metals

33578 — AUSTRALIA — Precious metal (e.g. platinum-rhodium) thermocouples for higher temperatures. Initially seeks agency but willing to discuss licensing agreements. PYROTENAX Australia Pty. Ltd., Attn: N. S. Candy, Gen. Mgr. (dist., mfr.), 45 Normanby Rd., Clayton, Victoria, P.O. Box 171, Clayton, Victoria 3168. WTD 2/71.

General hardware

34220—VIET NAM—Hardware including adjustable wrenches: straight snips—tin shears, heavy duty pipe wrenches (strength pattern), vise-grip, locking wrenches. Quotations, catalogs requested. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

Fabricated structural metal products

34413—VIET NAM — Iron and steel milled products including plain round concrete reinforcement bars; prime hot rolled carbon steel wire rods; hot rolled carbon steel strips; galvanized steel pipe. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

Engines, turbines

35191—VIET NAM—Gasoline engines: from 4-7 to 12 hp. Quotations, catalogs requested. Mekong Co., Ltd. (agent), 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

35193 — VIET NAM — Diesel engines: from 6-7 hp upward. Quotations, catalog requested. Mekong Co., Ltd. 45 B Pasteur, P.O. Box 2458, Saigon. WTD 8/71.

Farm machinery

35228—ITALY—Chain saws and accessories, motor harvesters, motor hoes, power mowers, pneumatic shears. C.O.M.A.S. (dist.), Via Vittorio Veneto 147, 27530 Belluno. WTD 1/71.

Construction, mining, materials handling machinery, equipment

35351 — SWITZERLAND — Conveying systems, overhead trolleys, for transfer of merchandise from shelf to counter, for supermarkets, department and discount stores. Exclusive agency. Photo-Scan AG (importer, dist., assemblers), Engimattstr. 22, 8002 Zurich. WTD 10/71.

Metalworking machinery

35441—ITALY — Unusual, sophisticated metalworking tools, principally for motor vehicle, electrical household appliance industries. Societa' Industriale Frapolli (dist., agent). Via Nizza 32, 10125 Torino. WTD 1/70.

Special industry machinery

35513—FRANCE — Sugar plant machinery including crushers, pulverizers, crystallizers, granulators. Etablissements B. Rossow & Cie (importer, dist., agent), 9 blvd. des Italiens, 75—Paris 2e. WTD 8/71.

35551 — HONG KONG — Offset printing presses. Hip Tin Shing Co. (importer, dist., agent), 251 Lockhart Rd., Hong Kong. WTD in prep.

35593 — COLOMBIA — Extrusion and blowmolding machines, plastic-working parts. Cabarria & Cia. C. por A. (importer, dist., agent), Carrera 13 No. 16-48, Apartado Aereo 3651, Bogota. WTD 10/70.

General industrial machinery

35642—SWITZERLAND — Air purification equipment for storage and sales area of supermarkets, department stores. Exclusive agency. Photo-Scan AG (importer, dist., assembler), Engimattstr. 22, 8002 Zurich. WTD 10/71.

Computing machines

35733 — SWEDEN — Computer peripherals. Saven AB (importer, agent), Björnsonsgatan 243, S-161 56 Bromma. WTD 9/71.

Service industry machines

35851—AUSTRIA—Ice cube makers for hotels, restaurants. Rehoga Ges.m.b.H. (importer, agent), Predigergasse 3, A-1010 Vienna. WTD 9/70.

35852—GERMANY—Room air conditioners. Gerhard Mueller (importer, dist., agent), 16 Grillparzerstr., POB 3, 6200 Wiesbaden. WTD 9/71.

35852—KOREA—Central air cooling system for unitary building; office, apartment buildings. Sung Pung Enterprise Co. (dist., agent), I.P.O. Box 2089, Seoul. WTD 6/71.

35853—COLOMBIA—Commercial, industrial refrigeration equipment. Cabarria & Cia. C. por A. (importer, dist., agent), Carrera 13 No. 16-48, Apartado Aereo 3651, Bogota. WTD in prep.

35854—COLOMBIA—Compressors, compressor units; all refrigerants. Cabarria & Cia. C. por A. (importer, dist., agent), Carrera 13 No. 16-48, Apartado Aereo 3651, Bogota. WTD in prep.

35855—COLOMBIA — Condensing units, all refrigerants. Cabarria & Cia. C. por A. (importer, dist., agent), Carrera 13 No. 16-48, Apartado Aereo 3651, Bogota. WTD in prep.

35890—AUSTRIA—Institutional kitchen equipment. Rehoga Ges.m.b.H. (importer, agent), Predigergasse 3, A-1010 Vienna. WTD 9/70.

35892—CANADA — Municipal chlorination systems for sewage treatment. Branom Instrument Co. (importer, dist.), Room 2—1037 West Broadway, Vancouver, B.C. WTD 9/71.

Electrical industrial apparatus

36210 — SWITZERLAND — High speed stepping motors for digital motions and for x/y positioning. Requests offers from manufacturers only. Dumaco AG, Attn: Mr. Manta, Jr. (dist., mfr.), Elfenaustrasse 3, 2500 Bienne. WTD 7/70.

36220—SWITZERLAND—Industrial controls, all kinds, for machine tools, high precision machinery. Requests offers from manufacturers only. Dumaco AG, Attn: Mr. Manta, Jr. (dist., mfr.), Elfenaustrasse 3, 2500 Bienne. WTD 7/70.

Communication equipment

36623—SWITZERLAND—Alarm, signal and safety control equipment for use with machine tools to prevent occupational hazards; commercial and industrial electronic trespassing, burglar alarm systems. Exclusive agency. Photo-Scan AG (importer, dist., assembler), Engimattstr. 22, 8002 Zurich. WTD 10/71.

36626 — FRANCE — Industrial laser equipment. COFIBA (dist., retailer), 125, Ave. Anatole France, 93-La Courneuve. WTD 12/70.

Electronic components, accessories

36790 — SWITZERLAND — Electronic specialties, all kinds, accessories, control components, for industrial use. Requests offers from manufacturers only. Dumaco AG, Attn: Mr. Manta, Jr. (dist., mfr.), Elfenaustrasse 3, 2500 Bienne. WTD 7/70.

Motor vehicles, equipment

37141—COLOMBIA—Spare parts, accessories for motor vehicles. Bernardo Carrasquilla-Angel (agent), Carrera 13 No. 13-17 Oficina 503, Apartado Aereo 12954, Bogota. WTD in prep.

37141—COLOMBIA—Spare parts, accessories for motor vehicles. Jorge E. Martinez-Rojas (dist., agent), Carrera 15 No. 19-19, Apartado Aereo 6652, Bogota. WTD in prep.

Instruments for measuring, controlling, indicating physical characteristics

38210 — SWITZERLAND — Industrial process control instruments; measuring and controlling instruments, all kinds. Requests offers from manufacturers only. Dumaco AG, Attn: Mr. Manta, Jr. (dist., mfr.), Elfenaustrasse 3, 2500 Bienne. WTD 7/70.

38216 — CANADA — Pollution control equipment for pulp, paper industry. Branom Instrument Co. (importer, dist.), Room 2—1037 West Broadway, Vancouver, B.C. WTD 9/71.

Surgical, medical, dental instruments

38410—SWITZERLAND—Surgical, medical instruments, all kinds. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

38421—SWITZERLAND—Surgical appliances, supplies, all kinds. Lamprecht AG, Attn: E. Schlumpf, Dir. (dist., mfr.), Birchstrasse 183, 8050 Zurich. WTD in prep.

Ophthalmic goods

38513 — SWITZERLAND — Pilot sun glasses, sun, sportsmen's goggles, especially treated against steaming up. Agimport SA, Attn: Rudolf H. Haussener, Pres. (importer, dist.), 3 chemin de la Fontaine, 1094 Paudex/Lausanne. WTD in prep.

Toys, amusement, sporting goods

39490—SWITZERLAND—Novelty sporting, athletic goods, accessories, except golf, technical and heavy equipment, not requiring after-sales service, incl. tennis, apparel, in price range of about $5 to 100 per unit, weighing not more than 20 lbs. per unit for easy mailing. Agimport SA, Attn: Rudolf H. Haussener, Pres. (importer, dist.), 3 chemin de la Fontaine, 1094 Paudex Lausanne. WTD in prep.

Future Construction Abroad

BAHAMAS—Bahamas Oil Refining Co. (BORCO), owned 65% by New England Petroleum Corp. and 35% by Chevron-Standard Oil Co. of Calif., is substantially increasing its $100 million investment in its **low sulphur fuel oil refinery** in Freeport, Grand Bahama. It has awarded a $40 million contract for a 200,000-barrel-a-day expansion to Snam Progetti of Milan, Italy, the firm which built the original 250,000-barrel refinery, completed in 1970. Another contract for a $5 million **expansion of the refinery's docking facilities** will be let in September. Under study is another major expansion which would add crude oil hydro-desulphurization units and possibly a sulphuric acid manufacturing facility. This proposed expansion could cost as much as $100 million and offers a major trade opportunity to U.S. contractors and equipment manufacturers. A fact sheet on the present BORCO refinery can be obtained from U.S. Department of Commerce, BDC-584, Washington, D.C. 20230.

CANADA—Jean Marcotte, Director of the Water Purification Office of the Montreal Urban Community, has stated that funds are expected to be voted so that work can begin on the plans for the first phase of the **$300 million Montreal Sewage Treatment Project**. Tenders for the collector sewers system will probably be called in the next few months and those for the treatment plant in the next several years.

FRANCE—Recent press reports have provided details on the future construction of **tobacco processing plant** in the Riom area (center of France) by Service d'Exploitation Industrielle des Tabacs et Allumettes—SEITA—(Industrial Exploitation Service of Tobaccos and Matches). This plant will cover a 40-acre area on a 75-acre industrial zone. All activities of the French firm Manufacture des Tabacs, presently in Riom and employing 600 persons, will be transferred to this new plant. Interested U.S. firms may contact: SEITA, 53, quai d'Orsay, 75—Paris 7e.

JAMAICA—The Agricultural Marketing Corp. (AMC), 188 Spanish Town Road, Kingston 11, is to install a **blast-freezing plant** to store white sweet potatoes, negro yams and some other root crops which can be suitably processed by this method. The plant envisioned would be capable of processing 50 tons of food per five-day week. The AMC is a big exporter of tropical foods to the United States, Canada and the United Kingdom. It recently concluded agreements to ship $600,000 worth of these foods to New York in 1971. U.S. manufacturers of blast-freezing equipment are being asked to submit brochures of their equipment and quotations to the AMC as soon as possible.

JAMAICA—Details on the financing of the construction of **255-room hotel in Falmouth,** 23 miles east of Montego Bay, are being worked out by the promoters, Arison Enterprises of the U.S. and Hotel Corp. of Jamaica Ltd., a subsidiary of the Jamaica Development Bank. Construction and operation of the luxury hotel will be in the hands of a local company, Trelawny Resorts Ltd. (no Jamaican address yet) which has an authorized share capital of $4.2 million. The project is expected to cost $12.6 million. Loan funds to the amount of $8.14 million are to be made available to Trelawny Resorts on a construction credit basis by Coutino, Caro and Co. of Hamburg, West Germany. Most of the planning is being carried out by Arison Shipping Co., 820 Biscayne Ave., Miami, Fla., a subsidiary of the American partners in the enterprise.

TRUCIAL STATES—Since the original notice of the **Abu Dhabi cement plant** project was published in *Commerce Today*, June 14, responsibility for the venture has been shifted to the Department of Petroleum Affairs, which is anxious to hear from American companies which might be interested in constructing a dry process cement plant having a capacity of roughly 200,000 tons per year. Interested American companies should now write directly to Mohamed Sharef, Department of Petroleum and Industry, P.O. Box 9. Abu Dhabi. Mr. Sharef expects tenders for the plant to be called for in about six months.

TUNISIA—An Italian consulting firm recently completed a study on the infrastructure and hotel capacity needs for the anticipated development of **tourism in Tunisia** to 1986. The study calculates that the seven zones will need **174 new hotels, comprising 105,000 beds,** at a cost of 174 million Dinars ($330 million). An analysis of this study can be obtained from U.S. Department of Commerce, BDC-584, Washington, D.C. 20230.

Algeria Announces Tenders On Radio Telephone Equipment

Algeria's Ministry of Posts and Telecommunications has issued a tender for the supply and installation of radio telephone equipment. Bid deadline is Nov. 20. Bid should offer 17 h.f. SSB transmitters and 26 h.f. SSB receivers.

Copies of tender announcement and specifications are available from the Ministere Des PTT, Sous-Direction Du Materiel Et Des Marches-227, 4, Boulevard Salah Bouakouir, Algiers, or on a short-term loan basis to firms located in the U.S. from the Communications Div., BDC-720, Room 4320, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-4823)

Libya Announces Tenders On Radio Equipment

Libya's Posts and Telecommunications Corp. has issued tender no. 27/71 for the supply of radio equipment. Bid deadline is Nov. 20.

Bid should offer VHF and/or HF transmitters and receivers. Copies of tender announcement and specifications are available from the Financial Division Posts and Telecommunications Corp., second floor, Municipality Bldg., Alger Square, Tripoli, against payment of $56.

Other Foreign Official Tenders

ALGERIA—The Ministry of Higher Education has issued an international tender for a variety of **equipment and scientific apparatus to equip laboratories** at the University of Algiers. The laboratories to be equipped are: medical and pharmaceutical; biology; chemistry; geology. The bid deadline is Nov. 20. Invited by the Ministere de l'Euseignement Superieur et de la Recherche Scientifique, Sous Direction des Constructions et des Equipements, Chemin du Golf, Alger Algerie. Terms and specifications, in French, are available on short-term loan basis from the Business and Scientific Equipment Division, BDC-708, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2939.)

BURMA—Paints of a variety of colors, 4,700 imperial gallons; whiting powder, five tons; paste drier, 1,000 lbs.; raw linseed oil, 500 imperial gallons; boiled linseed oil, 500 gallons; turpentine, 200 gallons. Tender No. MEIC/B.R./15(T) 14(MC.ML.ES)71.72, bid deadline Nov. 18. The Chairman, Union of Burma Railway Board, Bogyoke Aungsan St., Rangoon. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Chemicals, Petroleum and Rubber Division, BDC-712, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-2239). A review copy will also be available at the Dept. of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 ★(415-556-5868).

CHILE—The bid deadline for INACAP tender BIRF—11/7, for equipment and machinery, should be Nov. 17 instead of Nov. 30. See *Commerce Today*, 10/4/71, p. 69 or *Commerce Business Daily*, 9/30/71, p. 15).

LIBYA—The Posts and Telecommunications Corp. has issued tender no. 21/71 for supply, construction and installation of a **telephone cable network for the city of Sebha.** Bid deadline 10 a.m., Nov. 11. Copies of tender announcement and specifications are available from the Financial Division, Posts and Telecommunications Corp., second floor, Municipality Building, Alger Square, Tripoli.

LIBYA—The Posts and Telecommunications Corp. has issued tender 23/71 for the supply and installation of a **telephone cable network for the city of Misurata.** Bid deadline is Nov. 20. Tender announcement and specifications available from the Financial Division, Posts and Telecommunications Corp., Municipality Bldg., Alger Square, Tripoli.

THAILAND—The Foreign Purchasing Sect., Procurement Div., Supply and Procurement Dept., Electricity Generating Auth. of Thailand, has set the deadline for Tender No. AO11 for the supply of **VHF communications equipment** for Dec. 2. Tender previously advertised in *Commerce Business Daily* of Oct. 18, and *Commerce Today* of Oct. 18.

International Business Reports

The Kennedy Round and the Future of American Trade. **By Thomas B. Curtis and John Robert Vastine, Jr. 250 pp. $17.50.**

This account of the five-year trade and tariff negotiations analyzes liberalized items by commodity group and discusses political problems in legal and economic contexts. The viewpoint is offered that there is currently a movement away from the stated goals of freer trade toward cartelization of trade in major commodities and toward a neomercantilist approach to world trade and economic policy problems. Recommends a U.S. foreign economic policy for the 1970s.

Write: Praeger Publishers, 111 Fourth Ave., New York, N. Y. 10003.

The Vienna Papers. **Published by the United States Council of the International Chamber of Commerce. 64 pp. $1.25.**

What do American businessmen have to say about pollution and the interrelationship between technology and society? What do they think ought to be done about these problems? The answers of some businessmen can be found in this pamphlet, which includes papers presented by U.S. businessmen at the International Chamber of Commerce Congress, held in Vienna in April 1971, the theme of which was "Technology and Society: A Challenge to Private Enterprise."

Write: United States Council of the International Chamber of Commerce, Inc., 1212 Avenue of the Americas, New York, N.Y. 10036.

Doing Business With Romania: New Opportunities for U.S. Businessmen. **1971. Published by the Embassy of Romania, Washington. 14 pp. Free.**

Sections of this booklet cover recent developments in U.S.-Romanian economic relations, commodities traded with the United States, major Romanian trading partners, Romania's Five-Year Plan, a list of export products for which Romania seeks U.S. markets, and state trading companies. A map of Romania is included.

Write: Romanian Commercial Office, 1607 23rd St. NW., Washington, D.C. 20008.

The Limits of Economic Growth in Spain. **By Manuel Roman. 200 pp. $15.**

Identifies the main structural obstacles to sustained economic growth after the 1959 devaluation of the peseta, following which Spain opened itself to the international market forces stemming from the EEC. Discusses how and why these structural defects forced devaluation again in 1967, despite the great inflow of foreign exchange, and makes recommendations for their correction. Includes analyses of post-1959 agriculture, the tourist revolution, emigration, industry, labor strategy and stagnation.

Write: Praeger Publishers, 111 Fourth Ave., New York, N.Y. 10003.

The Industrial Policies of 14 Member Countries. **Published by the Organization for Economic Cooperation and Development. $5.75.**

The development of policies affecting industry in the context of general economic policy is the subject of this country-by-country survey. The 14 countries covered are: Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

The survey is based on the reviews of national policies in this field carried out by the Organization's Industry Committee. The survey, which describes industrial policy as a relatively recent concept, draws attention to specific aspects of this policy as of the period 1969-70 in the light of the particular situations of the individual countries surveyed.

Write: OECD Publications Center, 1750 Pennsylvania Ave., NW., Washington, D.C. 20006.

Calendar For World Traders

Nov. 5—Atlanta—Seventh annual dinner of the World Trade Council of the Atlanta Chamber of Commerce, Marriott Motor Hotel. Speaker: Archie K. Davis, president of the Chamber of Commerce of the U.S.

Nov. 9—Chicago—Export seminar, Commerce Field Office.

Nov. 9—St. Louis—"Show You" export workshop, Commerce Field Office, 2 p.m.

Nov. 9—Seattle—Seminar on marketing & forwarding for exporters, Commerce Field Office, 10 a.m.

Nov. 10 — Louisville — 22nd Kentucky World Trade Conference, Kentucky Hotel. Sponsor: International Center, University of Louisville. Speaker: S. Stanley Katz, Director of Commerce's Office of International Investment.

Nov. 11 — Chicago — International Trade Club of Chicago luncheon, Marriott Motor Hotel.

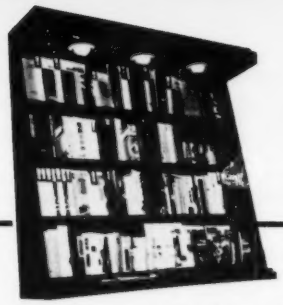
Nov. 11—Phoenix — Export workshop, Commerce Field Office, 10 a.m.

Nov. 16 — Seattle — Seminar on banking and insurance for exporters, Commerce Field Office, 10 a.m.

Nov. 17—Chicago—Chicago Midwest Credit Management Assn. meeting, Bismarck Hotel.

Nov. 18—New York—Overseas Automotive Club lunch meeting, Summit Hotel, noon.

Nov. 18—St. Louis—World Trade Club monthly dinner meeting, Bel Air West.



New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

United States Department of Commerce Publications, 1970 supplement. A catalog and index. 90pp. 75¢. The 1970 supplement is the nineteenth supplement to the basic volume U.S. Department of Commerce Publications.

National Industrial Pollution Control Council

The electric power industry. 24pp. 25¢. This report presents a general overview of the electric utility industry, the environmental side effects of its operations and the major programs underway to reduce them.

Fertilizers and agricultural chemicals. 44pp. 30¢. The importance of risks and benefits in both industries' operations is emphasized.

Rubber. 15pp. 20¢. Summarizes industry's approach to the problem of disposing of old tires.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF DOMESTIC COMMERCE

Growth in shipments—by classes of manufactured products, 1958-69. 80pp. 70¢. This second edition presents a statistical picture of growth for more than 400 four-digit product groups and 1,100 five-digit product classes.

Publications for business. 20pp. Free upon request. Lists periodicals, industry series, marketing publications, and publications on world trade available from the Bureau of Domestic Commerce.

Marketing information guide. A monthly annotated bibliography. Vol. 18, No. 9. Annual subscription $4.50 ($1.25 more for foreign mailing). Single copy 40¢.

BUREAU OF INTERNATIONAL COMMERCE

Index to foreign production and commercial reports. Index no. 9. Free. Available from the Commercial Intelligence Division, Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C. 20230.

Foreign Economic Trends

Annual subscription $15 ($6 more for foreign mailing). Single copy 10¢.
Thailand (ET 71-093). 12pp.
Uruguay (ET 71-094). 8pp.
Philippines (ET 71-095). 12pp.
Morocco (ET 71-096). 12pp.
Somali Democratic Republic (ET 71-097). 12pp.
Chad (ET 71-099). 8pp.

International Marketing Information Service

Exhibitor's Export Market Guides

Demand for U.S. materials handling equipment increases in United Kingdom (IMIS 71-032). 4pp. 10¢.

Scandinavian construction boom spurs U.S. export of building products (IMIS 71-033). 8pp. 10¢.

Demand for U.S. business equipment rings up sales in Mexico (IMIS 71-036). 8pp. 10¢.

Sales opportunities seen in Iran; 2nd U.S. solo exhibition planned (IMIS 71-037). 8pp. 10¢.

Demand for U.S. analytical laboratory equipment in Italy continues to rise (IMIS 71-038). 8pp. 10¢

World Markets for U.S. Exports

Industrial and scientific instruments—Malaysia (IMIS 71-236). 8pp. 10¢.

Pumps, valves and compressors—Taiwan (IMIS 71-237). 12pp. 10¢.

Overseas Business Reports

Annual subscription $16 ($5 additional for foreign mailing). Single copy 15¢. Latest reports include:

Market profiles for the Near East and South Asia (OBR 71-030). Supersedes OBR 70-31. 20pp.

Establishing a business in Italy (OBR 71-034). Supersedes OBR 67-59. 20pp.

Market profile for Latin America and the Caribbean (OBR 71-037). Supersedes OBR 70-30. 24pp.

U.S. foreign trade by quarters—April-June 1969 to April-June 1971 (OBR 71-039). 28pp.

Basic data on the economy of Lebanon (OBR 71-040). Supersedes OBR 69-28. 12pp.

Trade Lists

Listings of foreign business firms, classified under approximately 75 commodity and service groups, are used in locating sales outlets, sources of supply, direct market survey, and similar uses. The following is newly compiled; others are available. $1 each.

Business firms—Ivory Coast.
Business firms—Jamaica.
Business firms—Jordan.
Business firms—Kenya.
Business firms—Kuwait.
Business firms—Malawi.

ECONOMIC AFFAIRS

OFFICE OF BUSINESS ECONOMICS

Survey of Current Business. Volume 51, No. 9. Annual subscription, including weekly statistical supplement, $9 ($3.75 more for foreign mailing). Single copy $1.

BUREAU OF THE CENSUS

Business conditions digest. Data through August. Series ES1 No. 71-9. Annual subscription including supplements, $15 ($3.75 more for foreign mailing). Single copy $1.50.

Defense indicators. September. Series ES4, No. 71-9. Annual subscription $3.50 ($1 more for foreign mailing). Single copy 35¢.

Census Bureau methodological research, 1970. 24pp. Single copy 30¢. This is a list of staff papers and publications on Bureau of the Census methodological research. Previous lists covered the years 1963 to 1966, 1967, 1968, and 1969.

Bureau of the Census catalog. Jan.-June. 164pp. Part I, publications, part II, data files and special tabulations. Subscription $3 for 4 consecutive issues, including 12 issues of the monthly supplement; (75¢ more for foreign mailing). Single copies vary in price. This issue 60¢.

Small-area data notes. Vol. 6, No. 10. 8pp. 10¢.

U.S. commodity exports and imports as related to output 1968 and 1967. Series ES2 No. 11. 212pp. Price $1.75.

Statistical abstract of the United States 1971. 92d annual edition. Price $5.50 (cloth). 1,038pp. The standard summary of statistics on U.S. social, political, and economic organization.

Agriculture

Cotton production in the U.S.: crop of 1970. 28pp. 40¢.

Report on cotton ginnings prior to Oct. 1 for the crop of 1971, by states (A10: 71-5). 10¢.

Construction and Housing

Housing authorized by building permits and public contracts: July 1971 (C40-71-7). Single copy 55¢.

Housing starts: August 1971 (C20-71-8). Annual subscription $2. Single copy 20¢.

Housing completions: June 1971 (C22-71-6). Annual subscription $1. Single copy 10¢.

1970 Census of Housing

Reports present statistics from the 1970 Census by blocks:

Waterloo, Iowa urbanized area (HC(3)-89). 42pp. plus seven maps. $1.75.

Lexington Ky. urbanized area (HC(3)-94). 31pp. plus five maps. $1.50.

Manchester, N.H. urbanized area (HC(3)-148). 36pp. plus six maps. $1.75.

Lawton, Okla. urbanized area (HC(3)-190). 30pp. plus five maps. $1.50.

General Housing Characteristics

Florida (HC(1)-A11). 140pp. $1.25.
Iowa (HC(1)-A17). 100pp. $1.25.
Kentucky (HC(1)-A19). 108pp. $1.25.
Maryland (HC(1)-A22). 95pp. $1.
Michigan (HC(1)-A24). 132pp. $1.50.
South Carolina (HC(1)-A42). 84pp. $1.

Distribution and Services

Weekly retail trade. Estimated sales of U.S. retail stores, week ending Oct. 9 (CB 71-362). 2pp. 10¢

Foreign Trade

Imports commodity by country: July 1971 (FT 135-71-7). Annual subscription $21 ($5.25 more for foreign mailing). Single copy $1.75.

Highlights of exports and imports: August 1971. (FT 990-71-8). Annual subscription $5 ($1.25 more for foreign mailing). Single copy 45¢.

Gold movements: August 1971. (FT 2402-71-8). Annual subscription $1. Single copy 10¢.

General imports cotton manufactures: August 1971. (FT 130-71-8). Annual subscription $1. Single copy 10¢.

Puerto Rico and U.S. possessions: May 1971 (FT 800-71-5). Annual subscription $2.50 (75¢ more for foreign mailing). Single copy 20¢.

Bunker fuels: August 1971 (FT 810-71-8). Annual sub. $1. Single copy 10¢.

Waterborne exports and general imports: July 1971 (FT 985-71-7). Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

Geography

New uses of Census resources (Series GE-40 No. 7). 64pp. 60¢. Contains the Southern California Census use study and a related paper.

Governments

Special and technical services from the Bureau of the Census. Available to state and local governments. 28pp. 30¢.

Industry

Wool broadwoven goods summary for 1970 (Series MQ-22T.3(70)-5). 4 pp. $1 per year. Single copy 25¢.

Metal cans—summary for 1970 (Series: M34D(70)-13). 16pp. $1.50 per year. Single copy 15¢.

Farm machines and equipment: 1970 (Ser.: MA-35A(70)-1). 16pp. Price 25¢.

Electric housewares and fans 1970 (Series: MA-36E(70)-1). 8pp. Single copy 25¢.

Home-type radio receivers and television sets, automobile radios, phonographs, and record player attachments 1970 (Series: MA-36M(70)-1). 8pp. Single copy 25¢.

Fluorescent lamp ballasts—summary for 1970 (Series: MQ-36C(70)-5). 8pp. $1 per year. Single copy 25¢.

Consumption on the woolen and worsted systems: summary for 1970 (Series: M22D(70)-13). Price 15¢; $2 per year.

Population

Social and economic variations in marriage, divorce, and remarriage: 1967 (Series P-20, No. 223). 100pp. $1.

Current population reports issued in Series P-20, P-23, P-25, P-26, P-27, P-28 (summaries only), P-60, and P-65 are sold as a single consolidated subscription at $14 per year, $4.30 more for foreign mailing.

Population estimates and projections. Provisional estimates of the population of states: July 1, 1971 and 1970 (Series P-25, No. 468). 2pp. 5¢.

Population of Peru, estimates and projections: 1962-2002. (Series P-96, No. 4). 104pp. $1.

1970 Census of Population

General Population Characteristics

Florida (PC(1)-B11). 165pp. $1.25.
Iowa (PC(1)-B17). 167pp. $1.50.
Kentucky (PC(1)-B19). 167pp. $1.50.
Louisiana (PC(1)-B20). 127pp. $1.25.
Massachusetts (PC(1)-B23). 195pp. $1.25.

Number of Inhabitants

New Jersey (PC(1)-A32). 56pp. 50¢.

1970 Census of Population and Housing

General Demographic Trends for Metropolitan Areas, 1960 to 1970—Final Reports

Ohio (PHC(2)-37). 76pp. 55¢.
Pennsylvania (PHC(2)-40). 60pp. 50¢.
Texas (PHC(2)-45). 88pp. 75¢.
Classified index of industries and occupations. September. 158pp. $2.

SCIENCE AND TECHNOLOGY

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Monthly weather review. Vol. 99, No. 9. Annual subscription $10.50 ($2.75 for foreign mailing). Single copy $1.

Environmental Research Laboratories

A note on terminologies used in gaseous absorption processes (ERL 211-WPL 15). 12pp. 25¢. The relationships among the systems of units for absorption coefficients, optical paths, and intensities for gaseous processes are discussed. A table shows the interconnecting factors.

National Marine Fisheries Service

Sanitation guidelines for the control of Salmonella in the production of fish meal (NMFS Circ-354). 15pp. 25¢.

A bibliography of the blackfin tuna, thunnus atlanticus (Lesson) (SSRF-635). 16pp. 25¢. One hundred eighty-four references on the blackfin tuna are listed.

Occurrence of larval, juvenile, and mature crabs in the vicinity of Beaufort Inlet, North Carolina (SSRF-637). 20pp. 25¢. Monthly samples from 13 ocean stations near Beaufort Inlet, N.C., were examined for the occurrence of crab larvae in 1962.

National Ocean Survey

United States earthquakes, 1969. 82pp. $1. This is the annual report of the National Earthquake Information Center, published each year since 1928.

National Weather Service

Weekly synoptic analyses, 5-, 2-, and 0.4-millibar surfaces for 1968 (NWS 14). 178pp. $1.50. Data from meteorological rockentsonde and rawinsonde observations have been employed to analyze a series of high-altitude synoptic charts.

NATIONAL BUREAU OF STANDARDS

JANAF thermochemical tables, second edition (NSRDS—NBS 37). 1141pp. $9.75. Supersedes PB 168-370 and addenda 1, 2 and 3. This edition contains thermodynamic properties for some 1099 chemical species.

Interrelations between cement & concrete properties—Part 6 (BSS 36). 118pp. $1.25. Data are presented on the properties of Portland cements, mortars and concretes from a long term study reported principally by Blaine and Arni.

The Menzel symposium on solar physics, atomic spectra, and gaseous nebulae (Spec. Publ. 353). 213pp. $1.75.

Testing of cover glasses for hemacytometer chambers (Tech. Note 579). 7pp. 20¢. This document describes a method of testing cover glasses for conformity to a planarity specification.

Effect of ceramic spectral emissivity variations on the computed luminous emissivity of the NBS standard of light (Tech. Note 595). 58pp. 65¢. A simplified model of the National Bureau of Standards (NBS) 1970 design for the standard of light (platinum point blackbody) is introduced.

OFFICE OF TELECOMMUNICATIONS

High-frequency propagation predictions and analysis for circuits from the USCG San Francisco Radio Station to ships and aircraft operating in the North Pacific area (ORER 15) 160pp. $1.25.

NATIONAL TECHNICAL INFORMATION SERVICE

Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price for each document is $3 (microfiche 95¢) unless otherwise specified.

Environmental pollution: noise pollution-noise effects on human performance (AD-729 850). Defense Documentation Center, Alexandria, Va., 101pp. DDC bibliography (with abstracts) citing references concerning effects of noise on motor reactions, hearing, speech, sleep, perception, the nervous system, visual signals, and fatigue.

Hijacking—selected readings (AD-729 414). Dept. of Transportation, Washington, D.C., 59pp. Partially annotated listing of journal and newspaper articles, books, reports, and congressional documents pertaining to aircraft hijackings (air piracy). Time period covered is February 1969-December 1970.

A study of the feasibility of predicting job tenure among employment service applicants through the use of biographical information (PB-202 200). Richardson, Bellows, Henry and Co., Inc., Washington, D.C., for the Manpower Administration, June 1971, 101pp.

Legal services evaluation study: literature search report (PB-202 675). Chilton Research Services, Philadelphia, Pa., for OEO, 439pp. An annotated bibliography of material dating from 1964 on legal services and related fields.

Women—their social and economic status: selected references (PB-202 155). Dept. of Labor, Washington, D.C., 46pp. Lists publications that treat various aspects of the social and economic status of women, primarily with reference to the United States.

The following reports concerning environmental management are available. Part I discusses ways of improving institutional arrangements for effective environmental management; Part II considers the environmental effects of building a jetport near Everglades Park, Florida:

Institutions for effective management of the environment, Part I (PB-199 180). By the National Academy of Sciences and National Academy of Engineering. 71pp.

Environmental problems in South Florida (PB-199 159). 85pp.

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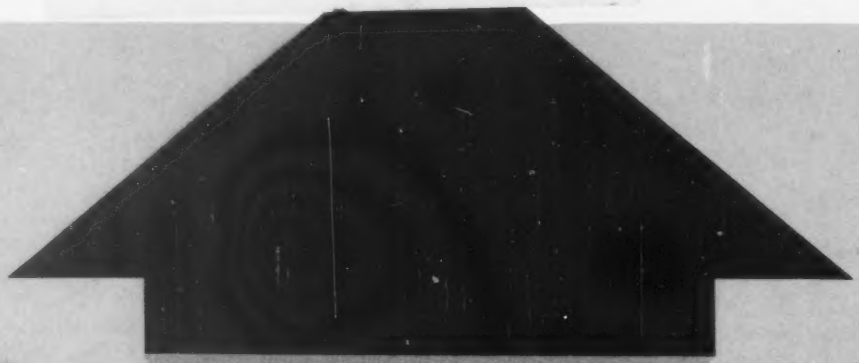

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